

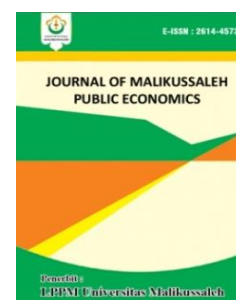
THE INFLUENCE OF MANPOWER AND HUMAN DEVELOPMENT INDEX ON ECONOMIC GROWTH IN DISTRICTS OF ACEH PROVINCE

Murtala^{*a}, Irma Sapitri^{*b},

^{*}Fakultas Ekonomi dan Bisnis, Universitas Malikussaleh

Corresponding Author : ^amurtala@unimal.ac.id

^birma.180430099@mhs.unimal.ac.id



ARTICLE INFORMATION

ABSTRACT

Keywords: Labor, Human Development Index (IPM), Economic Growth, ARDL.

This study aims to determine the effect of the workforce and the human development index (IPM) on economic growth in the districts of Aceh province in 2000-2020. This research uses multiple linear data for 20 years. This study used the Autoregressive Distributed Lag (ARDL) test analysis method. The results of this study indicate that in the long term and short term labor has a negative and insignificant effect on economic growth. Meanwhile, HDI in the long and short term has a positive and significant effect on economic growth.

1. INTRODUCTION

The process by which the productive capacity of the economy expands results in an increase in national income and is referred to as economic growth. Increasing the long-term economic capacity of a country to meet the needs of its citizens is known as economic growth. According to Dan (2020), these abilities develop together with technological advances and necessary adjustments to institutions and ideologies. The rate of economic growth in each country and province is different. The rate of economic growth which is determined by the rate of GDP growth (Yuliadi, 2009) reveals Aceh's economic performance. According to Maisyuri (2017), economic growth is a process that improves the institutional framework and leads to an increase in a country's real per capita income over time. As a process, economic growth requires sustainable transformation, efforts to increase per capita income, and improvement of the overall institutional framework.

The Human Development Index (IPM) can be used to determine the welfare of the population at both the level of physical and non-physical attributes of drivers. The Human Development Index can be measured physically by looking at life expectancy, and can also be measured non-physically by looking at literacy rates, economic capacity, and the average number of people attending school (Kadir, 2019).

According to Sukirno (2011), One indicator of the success of a region in economic development is economic growth. With economic growth, social welfare also increases. The growth rate of national products, also known as GDP at the national level and provincial and district/city GRDP, is one measure used to determine the level of economic growth. The following is a human development index table from 2016-2020

Table 1

Human Development Index data

Year	HDI (Human Development Index)
2016	70.00
2017	70.6
2018	71.1
2019	71.9
2020	71.9

Source: Aceh Statistics Center

District HDI in Aceh Province can be seen in table 1.1 above, there was a decrease in the period 2016 to 2017, from 70.00 to 70.60. However, in the period from 2018 to 2020 the HDI level continued to increase, the peak in 2020 increasing by 71.99 percent. If you look at district data, the 2016 to 2020 HDI that has declined the most is in the city of Subussalam. In addition, the record for the highest HDI was recorded in the city of Banda Aceh.

IPM aims to examine individual government assistance. Since people are objects of improvement and

should also be subjects, with the aim that they can gain beneficial commitments for the development of a region or the nation as a whole), Key aspects of human development, such as life expectancy and level of knowledge, are combined in the Human Development Index. A decent standard of living as measured by GRDP per capita after adjusting for the purchasing power of the Human Development Index, as well as adult literacy and the average length of schooling, play an important role in economic growth because good human development will make these factors out of production. The following is a workforce from 2016-2020.

Table 2
Labor Data (Millions)

Year	Labor
2016	2 548 929.00
2017	2 288 777.00
2018	2 353 440.00
2019	2 366 320.00
2020	2 526 505.00

Source: Aceh Statistics Center

From the table it can be seen very well that the degree of employment in the Aceh region has experienced high points and low points. Where the highest level of performance in 2016 was 2,548,929.00 and the lowest was in 2017, namely 2,288,777.00. This is due to lack of training and skills, irregularity between jobs and number of workers, etc.

workforce with sufficient education to be able to manage existing resources, which will provide opportunities for the community to be able to manage existing resources to encourage economic growth. Todaro (2000: 319), population development and labor force development as one of the positive factors that drive monetary development. A very large workforce will build up a pool of useful specialists, while greater population growth means expanding the size of the local market. The main source of labor is residents, but not all residents offer their jobs in the labor market, the basic idea is that the general component that is considered appropriate as work is used by the local area for creation activities (Sumarsono, 2009). :4). Economic growth in Aceh from 2016-2020 can be seen below.

Table 3
Economic Growth Data

Year	Economic growth (%)
2016	-1.89%
2017	2.87
2018	3,34
2019	3.88
2020	3.45

Source: Aceh Statistics Center

Monetary development in the Aceh region has essentially expanded. However, monetary developments in 2016 reduced by -1.89 percent. Then in 2019 it increased again by 3.88 percent and in 2018 and 2020 it continued to increase by 3.31 percent and 3.45 percent. This shows that the provincial self-reliance framework is not yet ready to properly handle budgets and foster existing regional capabilities, so that financial developments are still fluctuating.

Based on the background above, the author's desire arises to conduct research with the title "The Influence of Labor and Human Development Index on Economic Growth in the District of Aceh Province".

2. theoretical basis

Economic growth

Todaro (2006) says economic development is an expansion within drawn-out national boundaries concerned to provide different financial goods to its inhabitants. Economic development is obtained from changes in the value of the Province's Gross Domestic Product (Gross Domestic Product) of an area which is assessed at fixed costs (BPS, 2015).

Economic growth is seen by financial analysts as a macroeconomic problem in the long term. Economic development can be interpreted as a process of improving the state of the monetary economy of a country for a certain period of time. Sularso and Restianto (2011: 113) state that regional economic growth is an increase in GDP or GRDP whether the increase is more prominent or smaller than the rate of population development or there are adjustments to financial construction. GRDP development rate is the year-to-year development rate determined by the equation.

Labor

Todaro (2000: 319), population development and labor force development as one of the positive factors that drive monetary development. A very large workforce will build up a pool of useful specialists, while greater population growth means expanding the size of the local market. Work and non-work are recognized as exclusive as far as possible. Each nation provides alternative age limits. For example, in India, employment uses an age limit of 14 to 60 years, while individuals who are under 14 years of age or over 60 years are considered non-workers. The US workforce uses an age limit of 16 years and over, while those under 16 are not designated as specialists. In the Indonesian Territory as much as possible to work is set at 15 years in accordance with Regulation no.

Human Development Index (IPM)

The Human Development Index (IPM) is the equal proportion of futures, schools and ways of life for all

nations (BPS) 2007. HDI is used as a marker to survey quality improvement sections and to determine whether a nation is a created country or a developing country. , or immature countries and so on to measure the impact of monetary strategy on personal satisfaction. According to BPS (2016) the Human Improvement Record (IPM) is determined based on information that can describe four parts, namely achieving a long and healthy life specifically dealing with the areas of welfare, skill level,.

The Human Development Index was discovered in 1990 by the UNDP (Joined Countries Improvement Program). According to UNDP (1990), human improvement is the expansion of decisions for the population (growing individual choices), which must be seen as an effort to expand decisions and at the same time the level achieved from this effort.

Conceptual Framework

It can be seen that the conceptual framework allows this research to be directed according to the problem formulation and research objectives.

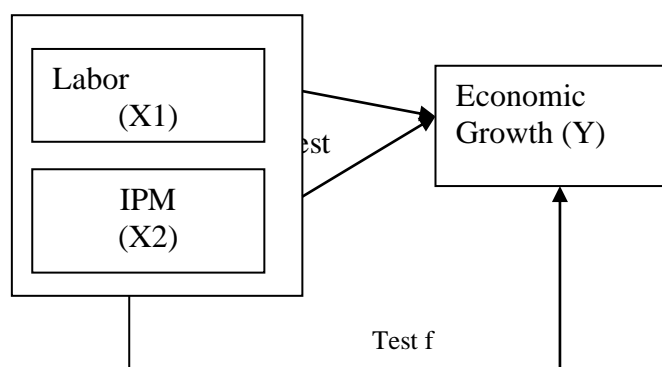


Figure 2.1 conceptual framework

The hypothesis is a temporary answer hypothesis whose truth has not been verified. The following are possible research hypothesis formulations, which are based on the problem formulation and conceptual framework:

1. The work force is estimated to influence financial development in the Aceh Region in 2000-2020.
2. The repair files are suspected to have had a significant effect on financial developments in the Aceh Region in 2000-2020.

3 RESEARCH METHODS

Research Objects and Locations

The object of this study is to dissect the impact of HDI, labor on economic growth directly or indirectly in urban areas/communities in the Aceh region. This exploration is directed at the Aceh Region by taking samples of 23 local/urban communities. This

examination involves sharing direct information over a very long time, from 2000 to 2020.

Types and Data Sources

The type of information used in this study is optional information as board information where there is a series of periods, in this study the type of information is annual for a long time (2000-2020). The source of information obtained for this study was obtained from the distribution of the Central Insight Agency (BPS).

Variable Operational Definitions

The following are the variables used in this study:

1. Economic Growth (Y) is the advancement of economic activity that causes the labor force and products sent to the public arena to expand and individual success to increase. In this study, it was expressed in percent over the 2000-2020 timeframe based on information obtained from the Focus Measurement Agency (BPS) authority website.
2. Workforce (X1) The number of workers maintained in an area (essential, optional and tertiary) in the economy in the Aceh Region. The information used for this variable is information on residents aged 15 years and over who work in local/urban communities in Aceh Region. This variable is estimated by the number of individuals.
3. Human Development Index (X2) Central Bureau of Statistics (2007) HDI is the correlation of future, skills, schooling and way of life for all countries around the planet. The HDI variable touched on in this study is communicated in percent units over the 2000-2020 timeframe.

Data analysis method

ARDL (Autoregressive Distributed Lag) Model Used to assess Aceh's economic growth, and employment, human development index from 2000-2020. On the ARDL model, Logical model \used in this research is the Autoregressive Disseminated Slack (ARDL) examination model. while remaining at various levels, a suitable inspection instrument is Vector Autoregression (VAR). In the relapsing model which incorporates the reasonable variable quality of the present value or past value of the independent factor regardless of the model which incorporates the slack of the dependent variable as one of the logical factors, it is called Autoregressive Disseminated Slack (ARDL) which is a dynamic and financial model. . This model can recognize the present moment and the long-term reaction of environmental factors to one unit change in the value of an illustrative variable (Gujarati, 2012).

Determination of whether the Y variable affects X and vice versa in ARDL estimation can be done by measuring the value in the t-table. If the t-statistic value is more is greater than the t-table, then it is possible to state that variable Y has an effect on variable X.

Stationarity Test

Testing the stationarity of information using a unique model is very important to do, the reason is to avoid misleading recurrence in assessing a model. This stationarity test is also often called the unit root test. There are several ways to perform a unit root test. Among them are Enhance Dikey Fuller and Philips Perron. Both acknowledge the existence of unitroot as invalid speculation. This review attempts a unit root test using the Philips-Perron (PP) technique. testing with the Philips-Perron (PP) strategy is a refinement of Dickey Fuller (DF) by allowing the assumption that there is a circulation blunder (Puspita, 2017).

Optimum Lag Determination

The optimal lag in the model is determined to determine the combination of ARDL model lags. In the ARDL model, the best way to handle lag is very important because a variable is also influenced by the variable itself and by other variables. It is possible to determine the length of a variable's response to past variables and other endogenous variables by using long lag logs, according to Nizar (2012). By using the information criteria, the best lag capability is achieved by having the highest score among the accumulated lags. The value with the most asterisks will be used to estimate the ARDL model at various lag levels to be the best.

Granger Causality Test

The next step is to use the causality test, which determines how the independent and dependent variables interact with each other. The causality test is used to determine how the present is affected by the past.

This causality test basically assumes that only two time sequences of the two variables contain relevant information for between two or more variables to test this empirical hypothesis. Granger causality test is a technique to determine where from the point of view where the dependent variable can be placed by other independent variables, a dependent variable can be influenced by other variables (independent variables).

Cointegration Test Bound Test

The cointegration test aims to determine whether two or more variables are not stationary at the integrated level. When non-stationary variables are

combined to produce stationary variables, this integration is very important.

The idea of cointegration was put forward by Engle and Granger in 1987 where eth must be set at I (0) to create long-term harmony. This review tests cointegration using the Bound Testing Cointegration approach. This strategy is carried out by comparing the specified F measurement value and the upper limit emergency value (I) (0) (Nur Fadhilah, 2017).

ARDL MODELS

The ARDL (Autoregressive Appropriated Slack) model is the impact of X and Y factors, sometimes including the influence of Y variables from the past on the current Y value. This technique uses the determination of the Autoregressive Dispersed Slack (ARDL) model. The general model of ARDL is the equation:

$$\Delta Y_t = \beta_0 + \sum_{i=1}^n \beta_1 \Delta y_{t-1} + \sum_{i=0}^n \delta_1 \Delta x_{t-1} + \varphi_1 y_{t-1} + \varphi_2 x_{t-1} + \mu_t$$

Where

$\beta_{t,at}$: Coefficient of short-term relationship

$\beta_{t,at}$: ARDL coefficient of long-term relationship

μ : Disturbance error(whitenoise)

Model Stability Test

The ARDL model stability test in this study used the CUSUM test with a certainty level of 95%. CUSUM test results for the ARDL model in this review. Security is still in the air from where the blue CUSUM line is between the two red 5% interest lines.

Research result

Data Stationarity Test Results

The stationarity test is in most cases called the unit root test. In applying or dealing with time series information, the stationarity of the information used is stated. The goal is to get a stable average value. So that the relapse model that will be obtained has a reliable assessment capability and assesses the presence of spearing relapse. The follow-up effects of the Philips - Perront Root Test (PP) unit test must be seen in the attached table:

Table 4
Stationarity Test Results Data

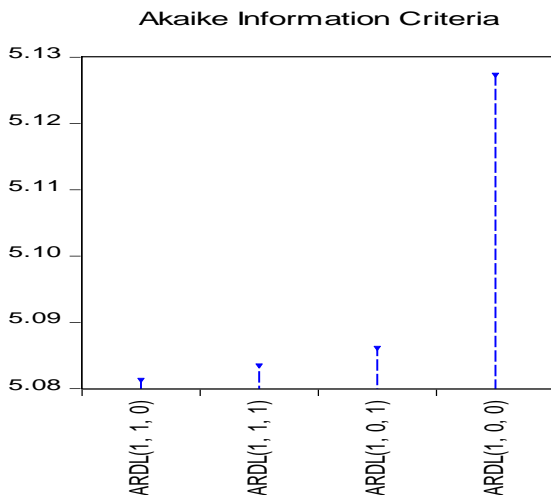
Var iabl e	Unit Root	Philips Perron Test Statistics	Critical Value (5%)	Prob pp	Inform ation
PE	Level s	-3.317855	- 3.02068 6	0.0277	station ary
Kin der	1st differ	-5.222064	- 3.02997	0.0005	station ary

gar ten	ence		0		
IP M	Levels	-2.398438	-3.020686	0.1545	stationary

Source: processed data, 2022

According to Widarjono (2007), the solution to avoid this linear regression is to change the data into stationary data from non-stationary data. Philips-Perront unit root test can be concluded that the 2 variables in this study are stationary in the first difference, namely the PE and TK variables, except for the HDI variable which is stationary at the first level of difference and the second difference using constant regression (Intercep) at 1%, 5% level, and 10%. Where the probability value is less than 0.05 (Prob <0.05). This means that all variables can be continued to be tested using either the first different or the second different. Based on the stationarity test results, the suitable model in this study is Auto Regressive Distributed Lag (ARDL).

Optimum Lag Determination



Source: processed data, 2022

Has a result of Akaike Data Measures (AIC) calculations, the ideal slack is obtained as slack 1. This happens because in determining the AIC value, the shortest line occurs at the ARDL point (1, 1,0). So it tends to be assumed that the ideal slack used in the ARDL model is slack 1.

Granger Causality Test

Granger Causality Test is planned to decide whether there is a suitable relationship between the factors or not. In this review, the Granger causality test was completed using the eviews 10 application. The following are the side effects of the Granger Causality Test in the table below this.

Table 5
Granger Causality Test results

Null Hypothesis:	Obs	F-Statistics	Prob.
IPM does not Granger Cause PE	20	1.37361	0.2574
PE does not Granger Cause HDI		1.19796	0.2890
LOG_TK does not Granger Cause PE	20	0.33916	0.5680
PE does not Granger Cause LOG_TK		3.89258	0.0650
LOG_TK does not Granger Cause IPM	20	10.6360	0.0046
IPM does not Granger Cause LOG_TK		0.85274	0.3687

Source: processed data: 2022

Based on table 4.2 above, those that have a tendency for a relationship lower than alpha 0.05 are known to have a causal relationship, so H0 is then rejected, indicating that one variable will affect many factors.

The HDI variable basically affects PE with prob. worth 0.2574 > 0.05, while PE fundamentally does not affect PE with a high probability. 0.2890 > 0.05. There is an assumption that there is unidirectional causality between HDI and PE factors, especially only in terms of HDI fundamentally affects PE and vice versa does not matter.

The TK variable basically does not affect the PE with the prob value. 0.5680 > 0.05 while PE does not necessarily affect TK with a prob value. 0.0650 > 0.05. This tends to reason that there is no unidirectional causality between TK and PE factors. prob price. 0.1538 > 0.05. It tends to be suspected that there is no unidirectional causality between TK and PE factors.

Cointegration Test

The cointegration test is used to see if there is a long-term relationship between the independent and dependent variables. Bound TWS is used for cointegration testing. The bound test requires that the value of the F-statistic is compared to the critical value of the lower limit (10 Bound) and the upper limit (11 Bound). The autoregressive distributed lag (ARDL) model is used in this study if cointegration occurs during the bound test. Use the VAR model if it is not integrated. The results of the cointegration bound test are as follows.

Table 6
Cointegration Test Results

Null Hypothesis: No levels relationship				
F-Bounds Test				
Test Statistics	Value	Significant	i(0)	I(1)
Asymptotic: n=1000				
F-statistics	4.5364	10%	2.63	3.35
K	2	5%	3.1	3.87
		2.5%	3.55	4.38

	1%	4.13	5
Actual Sample Size	Finite Samples: n=35		
	10%	2,845	3,623
	5%	3,478	4,335
	1%	4,948	6028
17	Finite Samples: n=30		
	10%	2,915	3,695
	5%	3,538	4,428
	1%	5.155	6,265

Source: data processed in 2022

The bond test results from the cointegration test with the bound test approach, as shown in Table 4.4, show that cointegration occurs when the F measurement of I0 Bound is 4.536410, with F measurements greater than or equal to I0 Bound significant at 10% and 5%, respectively, or a certainty level of 1%, specifically for the PE (subordinate variable) TK and HDI variables. So it is very possible to describe that there is cointegration of the factors in the model being tried, so that there is a current and long-term balance of these factors.

ARDL Model Estimation Results

After contribution and stationarity testing, cointegration will then be handled on the information by ARDL checks. Information handling is separated into two parts, specifically temporary handling and remote handling. The momentary handling produces a temporary assessment that is handled brings the following table.

Short Term Testing

Table 7
The estimation results of the ARDL model in the short run

Variable	coefficient	std. Error	t-Statistics	Prob.
IPM	0.256332	0.320740	0.799190	0.4367
LOG_T				
K	-7.042882	5.932111	-1.187247	0.2536
C	87.34696	74.95689	1.165296	0.2621

Source: data processed 2022

As seen from Table 4.5, the temporary experimental results can be formed as follows:

$$\text{LOG_PE} = 87.34696 + 0.256332 \text{ IPM} - 7.042882 \text{ TK}$$

Considering that the constant value is 87.34696 it is very influential if HDI, TK and PE are temporarily stable, PE will increase by 87.34696% in the next year.

The HDI variable is 0.256332, meaning that assuming the HDI rises 1%, next year's HDI rises 0.256332%. HDI has a positive and large influence considering the likelihood value is $0.4367 > 0.05$.

So at that time the TK variable was -7.042882 which really means that if there is an increase of 1% then PE will decrease by -7.042882% in the following year. Kindergarten has a negative and massive impact on the grounds that the likelihood value is $0.2536 > 0.05$.

Long Term Testing

Table 7
ARDL model estimation results in the long term

Variables	coefficient	std. Error	t-Statistics	Prob.*
PE(-1)	-0.069721	0.295151	-0.236221	0.8165
IPM	0.686435	0.309509	2.217819	0.0424
HDI(-1)	-0.412231	0.268424	-1.535745	0.1454
LOG_TK	-7.533918	6.612151	-1.139405	0.2724
C	93.43686	80.61647	1.159029	0.2646

source processed in 2022

Seen from Table 4.6 The test results drawn using the ARDL model in the table can be seen as follows:

$$\text{LOG_PE} = 93.43686 - 0.686435 \text{ IPM} - 7.533918 \text{ LOG_TK}$$

Given this breakdown, it is very likely that the value of the constant is 93.43686. In fact, this means that if HDI, TK and PE are fixed, then PE will increase by 93.43686 % in the following year.

The HDI variable is 0.686435. actually means that if HDI rises 1% then PE will rise 0.686435% in the next year. HDI has a positive and massive influence because the likelihood value is $0.0424 < 0.05$. implying that any adjustments to the Human Improvement File will affect levels in Aceh Region.

Then the variable TK - 7.533918 really means that if TK increases by 1%, PE will decrease by -7.533918% in the following year. TK makes a negative difference and is not critical because the probability value is $0.2724 > 0.05$.

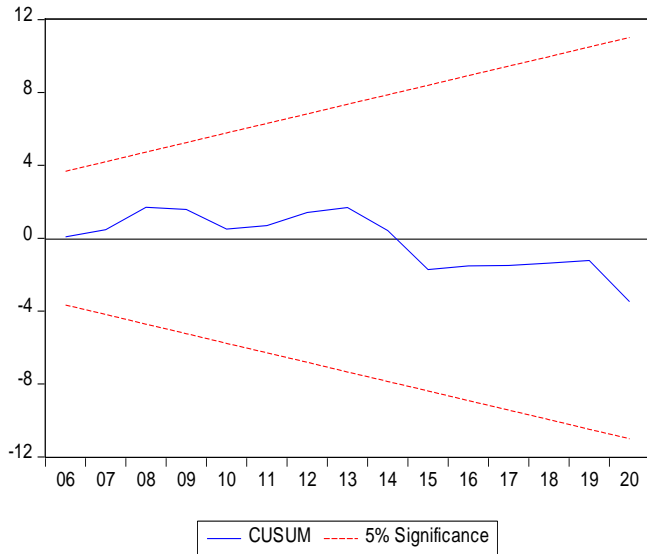
And the PE variable is -0.069721 meaning that if PE increases by 1% then PE will decrease -0.069721% in the next year. PE has a negative effect and is not important considering the likelihood value is $0.8165 > 0.05$.

Model Stability Testing

In testing the robustness of the underlying model, two can be recognized, CUSUM (Recursive Lingering Recursive Combined Sum) and CUSUMQ (Recursive

Recursive Remaining Squares Aggregate Sum). Next is the follow-up effect of the CUSUM test with PE as the dependent variable.

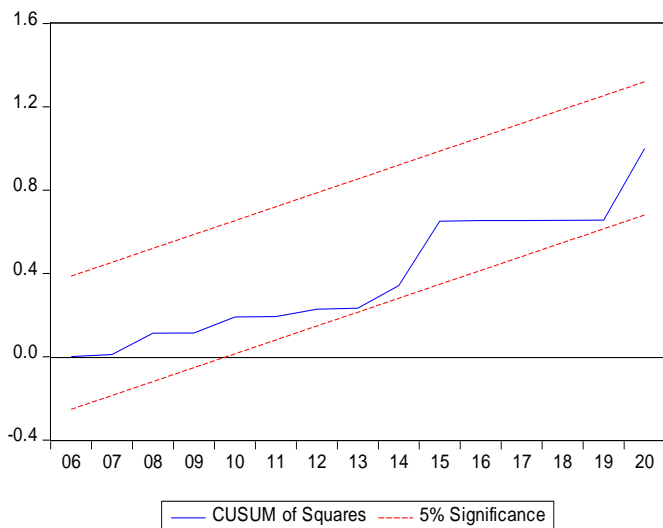
CUSUM TEST



Processed sources, 2022

Based on the figure above, the consequences of the CUSUM test can be understood, in particular, the plot of the number of W_r does not exceed the dotted line at a critical degree of 5%, the plot forms a straight line.

CUSUMQ



source processed: 2022

the consequences of the CUSUMQ test can be understood, in particular the plot of the amount of S_r does not exceed the cutoff line at a critical degree of 5%, the plot forms a straight line. Given the side effects of the two model stability tests above, it is quite possible to assume that the recurrence coefficient is fixed.

DISCUSSION

Effect of Human Development Index on Economic Growth

Seeing the consequences of handling the information above, it appears that temporarily, the HDI value is 0.256332 with a probability of $0.43676 < 0.05$ where the HDI influences PE in the Aceh region. Meanwhile, in the long run HDI affects PE in the Aceh region, namely 0.686435 with a probability of $0.0424 < 0.05$. So it tends to be seen that if the built HDI can provide a positive value, this shows that HDI is still very controlled and shows enormous financial development. Furthermore, assuming the number of positions decreases so that unemployment expands in Aceh, this can reduce the total individual salary as a variable that affects HDI in a period so that it does not add to economic growth. This examination is in accordance with the results of exploration led by ((Karlina, 2017), (Zamrodah, 2016),

Effect of Labor on Economic Growth

Based on the results of the information processing above, it shows that in the short term, labor has a negative and significant effect on economic growth in Aceh. This can be seen from the probability of 0.2536 0.05, which is -7.042882. Meanwhile, the probability of -7.533918 workforce having a negative impact on Aceh's long-term economic growth is 0.2724. so that individuals who were previously poor can get wages or salaries as workers as a result of absorption of labor. However, the poverty rate in Aceh Province was not significantly reduced by a less skilled workforce. This research is in line with the results of research conducted by (Silitonga, 2021), (Larasati and Sulasmiyati, 2018), (Simanungkalit, 2020).

CONCLUSION AND SUGGESTION

Conclusion

Remembering the conversation that was finished, the accompanying ending can be drawn:

1. For a while the HDI variable has an effect on PE in Aceh. In the long run the HDI variable affects PE in Aceh.
2. For a while the work variable has an effect on PE in Aceh. In the long run the variable of employment influences PE in Aceh.

Suggestion

Given the consequences of the exploration and perception that has been carried out, the following ideas can be put forward:

1. The Aceh public authorities should focus more on issues and take approaches related to HDI control.

2. It is believed that public authorities can build up the quantity of positions in Aceh, so that they can increase the amount of wages that can affect the workforce in a period and can increase financial development. .
3. For specialist candidates, it is proposed to lead a similar examination involving various factors that influence PE in Aceh. in addition to the factors used in this review, adding long-term examinations and using different exploration strategies to advance logical wealth.

BIBLIOGRAPHY

- Arsyad (2010). Economic development. Fifth Edition, Yogyakarta
- Asnidar, (2018), the influence of the human development index (IPM) and inflation on economic growth in East Aceh district, Ocean Economic Journal: Vol 2. No.1
- Brata (2012). Fifth Edition Macroeconomic Theory. Jakarta: Erlangga publisher.
- Central statistics agency, aceh in numbers, 2000-2020 Central Bureau of Statistics. (2020). Human Development Index 2020. BPS Aceh Province
- Demrosalinda Maria Rorimpandey, Daisy SM Engka, IPFR (2022). The Effect of the Human Development Index, Labor and Domestic Investment on Economic Growth in North Minahasa Regency for the 2006-2020 Period. 22(6), 1–12.
- Dimas; Woyanti, N. (2009). Absorption of Labor in DKI Jakarta. Journal of Business and Economics (JBE), 16(1), 32–41.
- Firmansyah, M., (2016). Analysis of the pattern and structure of the growth of the economic sector in the city of Mataram and the surrounding districts on the island of Lombok. *Elasticity-Journal of Economic Development*
- Istianto, T., Kumenaung, AG, & Lapian, ALCP (2021). Analysis of the Influence of Regional Expenditures and the Human Development Index on the Economic Growth of Regencies and Cities in Bolaang Mongondow Raya. Journal of Regional Economic Development and Finance, 22(3), 75–95.
- Jhingan, ML.,(2010).Development and Planning Economics.Jakarta:PT.Raja Grafindo
- Kadir, IA (2019). Factors Influencing Economic Growth in Aceh Province 2003-2018 Period The Factors Influence Economic Growth in Aceh Province During 2003-2018 Period Agribusiness Study Program, Faculty of Agriculture, Syiah Kuala University * Corresponding au.
- 4(November), 273–282.
- Najmi, I. (2019). Analysis of the Influence of Economic Growth and Regional Original Income on the Human Development Index: Panel Data of 23 Districts/Cities of Aceh Province. Journal of Humanities : Journal of Social Sciences, Economics and Law, 3(1), 36–47. <https://doi.org/10.30601/humaniora.v3i1.239>
- Pertiwi, p. (2015). Analysis of Factors Influencing Income. Analysis of the Factors Affecting Labor Income in the Special Region of Yogyakarta.
- Soleha (2017). "Analysis Of The Factors Influencing The Human Development Index In DI Yogyakarta Province In 2011-2015". Indonesian Islamic University.
- Sri, S., & Andriyani, D. (2022). Analysis of the Effect of Distribution of Gross Regional Domestic Product and Growth Rate of GDP per Worker on the Human Development Index in Indonesia. 11, 8–14.
- Sukirno.(2011).Introductory Macroeconomic Theory. Jakarta: PT. King of Grafindo Persada
- Sularso., & Restianto (2011).” Factors influencing workforce” Indonesian Islamic University.
- Today, C. Smith. 2003. Economic Growth in the Third World. Eighth Edition. Jakarta: Erlangga Publisher