

Society, 8 (2), 596-610, 2020

P-ISSN: 2338-6932 | E-ISSN: 2597-4874

https://society.fisip.ubb.ac.id

Analysis of Macroeconomic Indicators and It's Effect on Human **Development Index (HDI)**

Prince Charles Heston Runtunuwu 🕑



Department of Development Economics, Faculty of Economics and Business, Universitas Khairun, 97719, Ternate, North Maluku Province, Indonesia Corresponding Author: princecharles@unkhair.ac.id

ARTICLE INFO

Publication Info: Literature Review



How to cite:

Runtunuwu, P. C. H. (2020). Analysis of Macroeconomic *Indicators and Its Effect on* Human Development Index (HDI). Society, 8(2), 596-610.

DOI: 10.33019/society.v8i2.246

Copyright © 2020. Owned by *Author(s), published by Society*





This is an open-access article.

License: Attribution-NonCommercial-ShareAlike (CC BY-NC-SA)

Received: October 8, 2020; Accepted: December 22, 2020; Published: December 30, 2020;

ABSTRACT

This research aims to determine the effect of inflation, per capita income. The method used is a quantitative method with a descriptive approach. The data analysis technique uses multiple linear regression models, which are continued by the classical assumption test. This research uses secondary data, precisely ten years of time-series data from 2010-2019 obtained from the Central Bureau of Statistics, books, literature, the internet, records, and other sources related. The research sample consisted of 40 data taken per quarter, from 2010-2019. The analytical method used in this research is multiple linear regressions. The results showed that inflation had a negative and insignificant effect on Human Development Index (HDI). In contrast, per capita income and unemployment had a negative and significant effect on Human Development Index (HDI). Inflation, per capita income, and unemployment significantly affected the Human Development Index (HDI) in Ternate City. The independent variable's determination (R Square) on the dependent variable is 0.836 or 83.6%. It means inflation, per capita income, and unemployment can affect the Human Development Index (HDI) in Ternate City at 83.6%, remaining 16.4% by other factors.

Keywords: Human Development *Index*; *Inflation;* Macroeconomic Indicator; Unemployment

596

1. Introduction

Inflation is a crucial indicator in macroeconomic control that has a broad impact on various economic sectors, with terms and boundaries still tolerant. That way, inflation will boost the economy. High inflation can disrupt the government's efforts to improve people's lives. Likewise, the inflation rate is too low will cause the production sector does not have the incentive to spur production.

Inflation is significant because high inflation will worsen social welfare. The annual inflation rate in Ternate city as follows:

Table 1. Annual Inflation Rate in Ternate City from 2010-2019

Year	Inflation Rate (%)
2010	5.32
2011	4.52
2012	3.29
2013	9.78
2014	9.34
2015	4.52
2016	1.91
2017	1.97
2018	4.12
2019	2.02

Source: Badan Pusat Statistik Kota Ternate (2014, 2017, 2020)

Table 1 shows that fluctuating annual inflation rate in Ternate city in the last ten years. These need monetary policy and fiscal policy to control and maintain the inflation rate to support Ternate's economy. The increase and decrease in inflation have both a positive and negative impact.

One of the positive impacts of inflation is that entrepreneurs get a higher income than the production costs they spend. If the price increases (demand-pull inflation), producers will be encouraged to increase the number of goods or services. This increase will undoubtedly increase the producer's income, mainly if selling goods or services classified as basic needs.

The per capita income is the average income of a country's population for a certain period, usually one year, by dividing the national income in a specific year divided by the number of people of a country. Per capita income is a measure of a country's prosperity. The higher the per capita income, the more prosperous the country will be.

Economic development is an increasing total income and per capita income by considering the increase in population and followed by fundamental changes in the economic structure of a country and equal distribution of income for a country's population. The government's development process is a development process that balances national development and regional economic development. National development purposes are to support and encourage the development of local development. On the other hand, local development enhanced development and dynamic national economic structure (Adisasmita, 2013). The annual growth rate of per capita income in Ternate city as follows:

Table 2. The Annual Growth Rate of Per Capita Income in Ternate city from 2010-2019

Year	Per Capita Income Rate (%)
2010	6.55
2011	6.76
2012	6.18
2013	4.93
2014	6.11
2015	5.45
2016	5.52
2017	5.11
2018	1.82
2019	2.45

Source: Badan Pusat Statistik Kota Ternate (2014, 2017, 2020)

Economic growth is also an essential factor in illustrating people's income, as seen through the Gross Regional Domestic Product indicator per capita. **Table 2** shows that the annual growth rate of per capita income in Ternate city has fluctuated wherein 2010 it was 6.55%, increasing in 2011 by 6.76% and decreasing in 2012 to 2018 then increasing in 2019 by 2.45%. Based on existing data, per capita income still needs to be increased.

High productivity in economic sectors impacts on increasing people's income. Despite experiencing relatively large population growth in 2018 by 2.24%, per capita income in Ternate city increases.

Per capita income, which has increased and economic growth continues in 2019, has an immediate impact on improving people's ability or purchasing power, which affects the demand for goods and services. The increasing productivity of goods and services will result in labor demand and reduce unemployment.

Unemployment is a condition when a person does not work in the productive age between 15 and 65. Unemployment occurs due to the number of the labor force, or job seekers are not proportional to the number of jobs. The problem of unemployment is complicated, not only on local or regional but also becoming an international concern. The Indonesian government has ratified the ILO Convention No. 88 concerning the employment service organization through Decree of the President of the Republic of Indonesia Number 36 of 2002 (Republik Indonesia, 2002). The Indonesian government must further improve services to job seekers and employment service organizations. Furthermore, the unemployment rate in Ternate City as follows:

Table 3. The Annual Unemployment Rate in Ternate City from 2010-2019

Year	Unemployment Rate (%)		
2010	10.31		
2011	8.27		
2012	7.72		
2013	4.73		
2014	8.72		
2015	6.87		

Copyright © 2020. Owned by Author(s), published by **Society**. This is an open-access article under the CC-BY-NC-SA license. https://doi.org/10.33019/society.v8i2.246

Year	Unemployment Rate (%)		
2016	4.01		
2017	7.71		
2018	5.91		
2019	5.79		

Source: Badan Pusat Statistik Kota Ternate (2014, 2017, 2020)

Unemployment will also has a negative effect on Human Development Index (HDI). The higher the unemployment rate, the decrease people's ability to access health and education services.

The Government of Ternate City policy in minimizing these conditions must be more serious, especially in conditions of inflation, per capita income, and unemployment, to support human welfare as measured by Human Development Index (HDI) increases.

Human Development Index (HDI) aims to measure the successful a country in human development. Human Development Index (HDI) is an indicator of the population's level of physical and non-physical quality (Majid, 2011).

Human Development Index (HDI) is used to measure the population's welfare level in an area. Human Development Index trend in Ternate city as follows:

Table 4. Human Development Index Trend in Ternate City from 2010-2019

Year	Human Development Index (HDI) (%)
2010	74.86
2011	75.52
2012	75.81
2013	76.69
2014	77.15
2015	77.64
2016	77.80
2017	78.48
2018	79.13
2019	80.03

Source: Badan Pusat Statistik Kota Ternate (2014, 2017, 2020)

The Government of Ternate city has carried out various development activities, especially those related to improving human resources quality. Thus, it is necessary to examine the human development achievements in Ternate city so far and the effect of inflation, per capita income, and unemployment on Human Development Index (HDI) in Ternate city.

2. Literature Review

2.1. Human Development Index (HDI)

National-building requires human resources who meet the qualifications of skills, knowledge, and competencies in various fields of expertise. National-building requires human resources who meet the qualifications of skills, knowledge, and competencies in various fields of expertise. So it needs a benchmark used to measures the quality of human development. It underlies the size set by the United Nations Development Programme in "Human

599

Development Index Report 1990: Concept and Measurement of Human Development", which is an approach used as a measure of the level of human development (United Nations Development Programme, 1990).

The Human Development Index is used to measure efforts to increase essential human capital capacity. Human Development is a development component through population empowerment that focuses on improving the human basis. The measurement of development using the dimension of education, health, and purchasing power figures. The higher the figure obtained, the more the development goals will be achieved. Development is a process to make changes for the better (Mangun, 2007).

As reflected in the human development index, the achievement of development goals is highly dependent on the government as a provider of supporting facilities (Mariska, 2015). In achieving development goals, it must be considering four components in human development (United Nations Development Programme, 1995) as follows:

- 1) Productivity
 - Humans must strive to increase productivity and participate fully in generating income and meeting the needs of life. Therefore, economic development interprets as a part of human development.
- 2) Equity
 - Everyone has the same opportunity to access economic and socio-political resources and remove all restrictions to prevent access to it. Because everyone must have the opportunity to participate in taking advantage of the existing benefits to improve the quality of life.
- 3) Continuity
 - Access to the opportunities or must ensure opportunities available for the present generation and prepared for future generations. All resources must always remain renewable.
- 4) Empowerment
 - All people are participating in determining their life choices. Likewise, in utilizing the development process, people must participate in making decisions.

There are several concepts of resource development which in a macro context constitute the whole process of human capacity building activities which include various activities, consisting of development of education and training, health and nutrition, job opportunities, healthy environment, development in the workplace, and political freedom.

According to the United Nations Development Programme (UNDP), the Human Development Index (HDI) measured human development outcomes based on several main quality components. As a quality of life measurement tool, HDI builts through key dimensions of human development: 1) a long and healthy life, 2) being knowledgeable and 3) have a decent standard of living (United Nations Development Programme, n.d.).

These three dimensions have a comprehensive meaning because they are related to many factors. In its first report, UNDP measured the dimensions of health using life expectancy at birth. Furthermore, to measure the dimensions of knowledge, literacy numbers are used. The Gross Regional Domestic Product (GRDP) indicator per capita measured decent living standard dimensions.

The categories for grouping the Human Development Index (HDI) value are as follows: HDI < 60 = Low HDI, $60 \le \text{HDI} < 70 = \text{Medium HDI}$, $70 \le \text{HDI} < 80 = \text{High HDI}$, HDI $\ge 80 = \text{Very High HDI}$



2.2. Inflation

Inflation is an increase in the price of several goods continuously. In general and entirely, inflation can be caused by excessive public demand (demand-pull inflation) and increased production costs (cost-push inflation) (Boediono, 1992). According to Atmadja (1999), inflation in Indonesia is short-term inflation and long-term inflation. Thus, inflation is a monetary phenomenon that has a broad impact on macroeconomic conditions. It is crucial to control the inflation rate.

Quantity Theory of Money is the classical theory that discusses inflation. However, this theory refined by the University of Chicago economists called the Monetarist Model in its development. This theory emphasizes the role of the money supply and public expectations regarding price increases against inflation. The essence of this theory is as follows:

- 1) Inflation occurs if there is an increase in circulation volume, both currency and demand deposits.
- 2) The inflation rate is also determined by the increase in the money supply and public expectations regarding future price increases.

2.3. Gross Regional Domestic Product (GDRP)

Gross Regional Domestic Product (GRDP) at market prices is the gross value added arising from all economic sectors in a region. The added value obtains from value-added a combination of production factors and raw materials in the production process. Added value calculation is the value of production (output) minus intermediate costs. The gross value added here includes the components of factor income (wages and salaries, interest, land rent and profits), depreciation, and net indirect taxes. By adding up the gross added value from each sector and adding up the gross added value from all these sectors, the Gross Regional Domestic Product will be obtained based on market prices.

According to Todaro & Smith (2003), GRDP is the total value of all final output produced by an economy at the regional level (either by residents of the region or residents of other areas who live in the area). GDRP is used as a development planning analysis and a barometer to measure the development results.

2.4. Unemployment

https://doi.org/10.33019/society.v8i2.246

The unemployed standard definition is labor force who unemployed, willing to work and to look for work. This definition is used in the National Labor Force Survey (Sakernas) from 1986 to 2000. In contrast, since 2001, the definition of unemployment has experienced an adjustment or expansion. Unemployment is labor force who looking for work or those preparing a business, or those who are not looking for work due to inability to get a job (previously categorized as non-labor force). Those who already have a job but have not started working are also known as open unemployment. Developing countries' situation shows that economic development cannot cope with faster employment opportunities than population growth. Therefore, the unemployment problem faced from year to year is getting more and more serious. The extent of this unemployment reflects the economic condition. The higher the unemployment rate, the worse the economy is.

2.5. The Relationship between Inflation and Human Development Index (HDI)

The cause of inflation is an increase in demand that exceeds supply or is above production capacity. If this occurs, inflation coming from the demand side (demand-pull inflation).

Copyright © 2020. Owned by Author(s), published by Society. This is an open-access article under the CC-BY-NC-SA license.



Inflation can also occur or come from the supply side. An increase in production costs caused prices to rise. If this occurs, inflation is called cost-push inflation (Sukirno, 2013).

Stable inflation is a prerequisite for economic growth and will ultimately benefit the people's welfare. Unstable inflation will create uncertainty for economic actors to make business decisions. Empirical reality shows that unstable inflation will make it difficult for people to consume and invest, reducing economic growth.

Gross Regional Domestic Product (GRDP) rather than improving the quality of human life. Human resource development tends to treat humans as input from the production process as tools, not as agents of change in the development process (Todaro & Smith, 2003). The basic needs approach focuses on providing goods and services to disadvantaged groups of people, rather than expanding the choices people have in all areas.

The human development approach combines aspects of commodity production and distribution and enhancing and utilizing human capabilities. Human development simultaneously sees all issues in society, economic growth, trade, employment, political freedom, and cultural values from a human perspective (Kuncoro, 2001).

2.6. The Relationship between Per Capita Income and Human Development Index (HDI)

An important indicator to determine the economic conditions within a certain period used data on Gross Regional Domestic Product (GRDP) at current market prices or constant market prices. According to Sukirno (2013), economic growth is output per capita increases in the long term, emphasizing three aspects: process, output per capita, and long term. Economic growth is a process, not just a snapshot of the economy. Regional development and sectoral development must be in line to make sectoral development in the regions run according to regional potentials and priorities.

Nowadays, the issue of human development achievement has become the attention of government administrators. There are various human development measures, but not all used as standard measures regions or countries comparison. Therefore, the United Nations (UN) has set a standard measure for human development, the Human Development Index (HDI), consisting of four indicators: life expectancy, literacy rate, average years of schooling, and purchasing power. Life expectancy indicators represent the dimensions of a long and healthy life. Furthermore, literacy rates and average years of schooling reflect the being knowledgeable dimension's output while purchasing power indicators to measure decent living dimensions.

2.7. The Relationship between Unemployment and Human Development Index (HDI)

Todaro & Smith (2003) explains that human development is an achievement in its. Human development plays a crucial role in shaping a country's ability to learn modern technology to develop its capacity to create job opportunities to reduce the number of unemployed and carry out sustainable human development. Reducing the number of unemployed and getting high income will increase human development by increasing household expenditures on more nutritious food and higher education. So that unemployment can be seen from the increased Human Development Index (HDI).



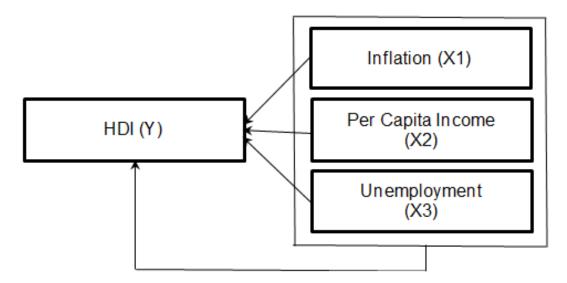


Figure 1. Framework

This research aims to examine the effect of inflation on Human Development Index (HDI), the relationship between per capita income and the Human Development Index (HDI), the relationship between unemployment and the Human Development Index (HDI), and the relationship between inflation, per Capita income, and unemployment on Human Development Index (HDI).

3. Research Methodology

This research took place in Ternate City, one of the municipalities in North Maluku, Indonesia. This research used time-series data from 2010-2019. The population is an area consisting of particular objects or subjects with specific characteristics and quality determined by the researcher. This research's object is data or economic reports at the Central Bureau of Statistics of Ternate City. The research sample consisted of 40 data taken per quarter, from 2010-2019.

Data used in this research are secondary data obtained from the Central Bureau of Statistics, books, literature, the internet, records, and other sources related to research problems. The secondary data needed in this research include:

- 1) Human Development Index (HDI) data in Ternate City in 2010-2019.
- 2) Inflation Data in Ternate City in 2010-2019.
- 3) Per Capita Income data in Ternate City in 2010-2019.
- 4) Unemployment Data in Ternate City in 2010-2019.

The analytical method used in this research is multiple linear regressions. The model in this research as follows:

Y it =
$$d0 + d1 X_1 + d2 X_2 + d3 X_3 + e$$

Information:

Y = Human Development Index (HDI)

 X_1 = Inflation

 X_2 = Per Capita Income



 X_3 = Unemployment

e = Confounding Factor (*error*)

d0 = Constants

d1 & d2 = Regression Coefficient I = N = Number of Observations (1)

t = Time Period (2010-2019 = 10)

4. Results and Discussion

4.1. Results

4.1.1. Needs Analysis

The regression model test used in this research greatly determines the analysis results related to the inflation rate, per capita income, and unemployment effects on Human Development Index (HDI) in Ternate City through a quantitative approach. However, before testing the regression model, it is necessary to test the classical assumptions first so that the expected regression models will indeed an excellent and efficient model.

4.1.1.1. Normality Test

The normality test examines whether the data used has a normal distribution or not using the Kolmogorov-Smirnov test for normality. The data has a normal distribution if the significant value is greater than 0.05 (sig.> 0.05) at the significance level α = 0.05. Conversely, if the sig value < 0.05, then the data is not a normal distribution.

Table 5. Normality Test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized
		Residual
N		40
Normal Parametersa,b	Mean	.0000000
	Std. Deviation	.57174823
Most Extreme Differences	Absolute	.149
	Positive	.149
	Negative	076
Kolmogorov-Smirnov Z		.149
Asymp. Sig. (2-tailed)		.025 ^c

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

Source: IBM SPSS Statistic 23 (processed data result)

Based on **Table 5**, the Kolmogorov-Smirnov value for all regression equations has a significance of 0.025 > 0.05, which means that the regression model meets the normality assumption that the data is a normal distribution. Data from the normality test result with statistical tests that the regression model in this research is suitable because it meets the normality assumption.

4.1.1.2. Multicollinearity Test

The multicollinearity test aims to test whether the regression model found a correlation



between the independent variables. A good regression model should not correlate with the independent variables. If the independent variables are mutually correlated, then these variables are not orthogonal. Variable Orthogonal is an independent variable whose correlation value between independent variables is 0. Multicollinearity sign seen by comparing the correlation coefficient between independent variables (Kuncoro, 2001). According to Ghozali (2006), no signs of multicollinearity if the Tolerance value > 0,100 and the value of VIF < 10.00. The results of data processing using the IBM SPSS Statistic 23 software for multicollinearity tests are as follows:

Table 6. Multicollinearity Test

Model		Tolerance	VIF
	Constant	Tolerance	• • • •
1	X1	0.885	1.130
1	X2	0.646	1.547
	Х3	0.709	1.411

Source: IBM SPSS Statistic 23 (processed data result)

The Tolerance value of each free variable is more than 0.100, and the VIF value of each of these variables is less than 10.00. Then there are no signs of multicollinearity in this test.

4.1.1.3. Autocorrelation Test

The autocorrelation test aims to test whether in a linear regression model. There is a correlation between the confounding error (residual) in period t with the error in period t-1 (previous). Autocorrelation test using Durbin-Watson statistics. The results of data processing using IBM SPSS Statistic 23 software for the autocorrelation test are as follows:

Table 7. Autocorrelation Test

DW	DL	DU	Description
0.243	1.339	1.659	No autocorrelation

Source: IBM SPSS Statistic 23 (processed data result)

Based on Table 7, the analysis results using IBM SPSS Statistic 23 show that the Durbin-Watson statistic value is 0.243 while the DL and DU values are according to the Durbin-Watson table. The DL value is 1.339, while the DU value is 1.659 and less than 4 - 1.659 (DU < DW ≤ 4 - DU). There is no autocorrelation in this test.

4.1.1.4. Heteroscedasticity Test

https://doi.org/10.33019/society.v8i2.246

The analysis results using IBM SPSS Statistic 23 software show that the points are randomly spread either above or below zero on the Y-axis and do not form a specific pattern or tendency on the plot diagram. It can identify no heteroscedasticity, and the regression model is suitable for predicting the Human Development Index (HDI). Overall, the model that meets the classical assumption test requirements is in the form of logarithms. It can be marked through the image scatterplot as follows:

Copyright © 2020. Owned by Author(s), published by Society. This is an open-access article under the CC-BY-NC-SA license.

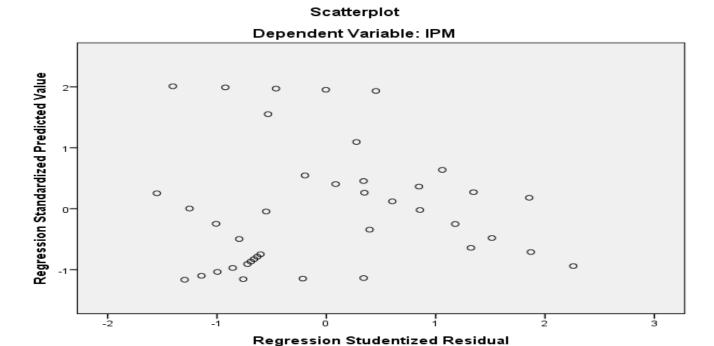


Figure 2. Heteroscedasticity Test

4.1.2. Statistical Analysis

4.1.2.1. Coefficient of Determination Test (R-Square)

Table 8. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921	.849	.836	.59509

Source: IBM SPSS Statistic 23 (processed data result)

Based on **Table 8**, the coefficient of determination aims to test the regression model's goodness of fit, seen from the R-Square value. Several factors affect the Human Development Index (HDI) in Ternate City, including inflation, per capita income, and unemployment. Three variables can explain the calculated value Adjusted R-Square coefficient determination by 0836 or 83,6% Human Development Index (HDI) in Ternate City. In contrast, the remaining 16.4% can be explained by other variables not examined in this research.

4.1.2.2. F-Statistical Test (Simultaneous Test)

Table 9. F-Statistical Test Result

F	Sig.
67.210	.000

Source: IBM SPSS Statistic 23 (processed data result)

Based on Table 9, multiple linear regression testing results using IBM SPSS Statistic 23 software explained in the F-test. The F-count value is 67,210, with a significant level of 0.000.



Then F-table distribution value is 2.859, which means that F-count > F-table. The dependent variable, namely inflation, per capita income, and unemployment, have a joint effect on the independent variable, namely the Human Development Index (HDI) in Ternate City.

4.1.2.3. T-Statistical Test (Partial Test)

Table 10. T-Statistical Test Result

	Model		lardized icients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	82.724	.435		190.194	.000
	Inflation	083	.040	143	-2.071	.046
	Income	692	.079	704	-8.721	.000
	Unemployment	209	.064	250	-3.248	.003

Source: IBM SPSS Statistic 23 (processed data result)

Based on the calculation results in **Table 10** above by using IBM SPSS Statistic 23 software analysis tool shows that the effect of each of the independent variables, namely the effect of inflation, per capita income, and unemployment on Human Development Index (HDI) as follows:

1) Inflation

Based on **Table 10**, the constant value obtained is 190.194 while the t value is -2.071 < from the t table is 2.029, and the significance value of the test results shows greater than 0.05, seen from 0.046 > 0.05. It shows that the inflation variable partially has no effect on Human Development Index (HDI) in Ternate City.

2) Per Capita Income

Based on **Table 10**, the constant value obtained is 190.194 while the t value is -8.721 < from the t table is 2.029 and the significance value of the test results shows less than 0.05, seen from 0.000 < 0.05. The per capita income variable partially affects the Human Development Index (HDI) in Ternate City.

3) Unemployment

Based on **Table 10**, the constant value obtained is 190,194, while the t value is -3,248 <from the t table of 2.029, and the significance value of the test results shows less than 0.05, seen from 0.003 < 0.05. The unemployment variable partially affects the Human Development Index (HDI) in Ternate City.

4.2. Discussion

https://doi.org/10.33019/society.v8i2.246

4.2.1. The Effect of Inflation on Human Development Index (HDI)

High inflation rates will affect the human development index. This research shows that inflation does not significantly affect the Human Development Index in Ternate City. Inflation is an economic phenomenon that troubles the economy of every country. The impact is broad, such as fixed income segments of people will suffer (reduced welfare). Because the price of raw goods increases, entrepreneurs will suffer too. The government also finds it difficult to raise taxes because both workers and producers suffer, and their welfare is declining.

Copyright © 2020. Owned by Author(s), published by Society. This is an open-access article under the CC-BY-NC-SA license.

607

Also, inflation has both positive and negative impacts on the economy, depending on how severe the inflation rate is. If the inflation that occurs includes mild inflation (below 10%), it will positively affect the economy. Because it increases national income and makes people enthusiastic about working, saving, and investing and vice versa, if inflation occurs badly (uncontrolled), then the economy will be sluggish and chaotic. Of course, it will reduce the level of community welfare.

The inflation variable is one of the independent variables that negatively affect the dependent variable, namely the Human Development Index (HDI) in Ternate City. This result is supported by research by Pangesti & Susanto (2018), which states that inflation does not affect the Human Development Index (HDI). The inflation on Human Development Index (HDI) is inelastic due to government policies' existence to assist economically weak or poor people such as market operations for necessities, direct cash assistance, healthy Indonesia card, and smart Indonesia card.

4.2.2. The Effect of Per Capita Income on Human Development Index (HDI)

The per capita income variable is one of the independent variables that negatively affect the dependent variable, namely the Human Development Index (HDI) in Ternate City. These research results match with the research conducted by Tarigan (2017) that the GDP per capita significantly affects the Human Development Index (HDI). One of the other macroeconomic indicators to measure economic development as a basis for evaluating the people of an area's welfare level is GRDP per capita. The value of GRDP per capita is a measure of the average gross value-added created by each people through economic activities. Thus, when the community productivity level increases, the GDP per capita in the area will increase. It will also improve the welfare of the community in the region.

These research results match with the theory by Kuncoro (2001), which states that an economy is experiencing growth or developing if the economic activity level is higher than the previous period's achievement. Thus, economic growth the achievement of a better than ever concerning the quality and quantity of economic activity of a region that would impact people's welfare. Economic growth is also something that is often associated with human development. To see how much economic growth in a region looks at the Gross Regional Domestic Product (GRDP).

The Central Statistics Agency also stated that the higher the GRDP per capita of a region, the greater the potential revenue source for that region. Therefore it can be seen that the GRDP will affect the ability of the community to meet their needs. If the GRDP increases, then the per capita income will increase. With the increase in the community's per capita income, the consumption will also increase, and in the end, the level of community welfare will also increase.

4.2.3. The Effect of Unemployment on Human Development Index (HDI)

These research results matches with Baeti (2013), that unemployment has a negative and significant effect on Human Development Index. These research results also match with the theory stated by Sukirno (2013) that unemployment will reduce people's income and reduce the level of one's prosperity and welfare, thus increasing the chance of being in a low Human Development Index. The high unemployment rate will also disturb the social and political stability of a country. The unemployment problem creates not only social problems but also creates political chaos. If this happens, it will not be easy to realize the target to increase the Human Development Index, both in the medium and long term.



5. Conclusion

Based on the research results, the following conclusions as follows: 1) Inflation, income per capita, and unemployment variables together significantly affect the Human Development Index (HDI) in Ternate City. 2) The partial test results of the inflation variable have a negative and insignificant effect on Human Development Index (HDI) in Ternate City. 3) The partial test results per capita income variable negatively and significantly affects the Human Development Index (HDI) in Ternate City. 4) The partial test results, the unemployment variable has a negative and significant effect on Human Development Index (HDI) in Ternate City. Because inflation does not significantly affect the Human Development Index in Ternate City, the local government must assist the weak or poor people economically to meet their daily needs. The significant per capita income on Human Development Index (HDI) is related to local governments' policies by providing the physical infrastructure that can increase economic activities mobility that affects the Human Development Index (HDI) in Ternate City.

In increasing the Human Development Index (HDI) in Ternate City, the government needs to realize equitable economic growth. Efforts to create output to absorb labor and reduce unemployment.

6. Acknowledgment

The author is grateful to express gratitude to all of those who have had the pleasure to work during this research conducted.

7. Declaration of Conflicting Interests

The author has declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

References

- Atmadja, A. S. (1999). Inflasi di Indonesia: Sumber-sumber penyebab dan pengendaliannya. *Jurnal Akuntansi dan Keuangan*, 1(1), 54-67. Retrieved from http://ced.petra.ac.id/index.php/aku/article/view/15656
- Adisasmita, R. (2013). *Teori-Teori Pembangunan Ekonomi: Pertumbuhan Ekonomi dan Pertumbuhan Wilayah* (1st ed.). Yogyakarta, Indonesia: Graha Ilmu.
- Badan Pusat Statistik Kota Ternate. (2014). *Kota Ternate Dalam Angka* 2014. Retrieved from https://ternatekota.bps.go.id/publication/2014/12/24/8308f9fedbf8e535f3484ce8/kotaternate-dalam-angka-2014.html
- Badan Pusat Statistik Kota Ternate. (2017). *Kota Ternate Dalam Angka* 2017. Retrieved from https://ternatekota.bps.go.id/publication/2017/08/11/8bfecfebe1424abba3ec4ffb/kotaternate-dalam-angka-2017.html
- Badan Pusat Statistik Kota Ternate. (2020). *Kota Ternate Dalam Angka* 2020. Retrieved from https://ternatekota.bps.go.id/publication/2020/05/20/ccf8e628574810acc6b31794/kota -ternate-dalam-angka-2020.html
- Baeti, N. (2013). Pengaruh pengangguran, pertumbuhan ekonomi, dan pengeluaran pemerintah terhadap pembangunan manusia kabupaten/kota di Provinsi Jawa Tengah tahun 2007-2011. *Economics Development Analysis Journal*, 2(3), 85-98. Retrieved from https://journal.unnes.ac.id/sju/index.php/edaj/article/view/1984

Boediono. (1992). Teori Pertumbuhan Ekonomi. Yogyakarta, Indonesia: BPFE.



- Ghozali, I. (2006). *Aplikasi Analisis Multivariate dengan Program SPSS*. Semarang, Indonesia: Badan penerbit Universitas Diponegoro.
- Kuncoro, E. A. (2001). *Cara Menggunakan dan Memaknai Analisis Asumsi Klasik,* (1st ed.). Bandung, Indonesia: Alfabeta.
- Majid, A. (2011). *Pendidikan Karakter Perspektif Islam* (1st ed.). Bandung, Indonesia: PT Remaja Rosdakarya.
- Mangun, N. (2007). *Analisis Potensi Ekonomi Kabupaten dan Kota di Propinsi Sulawesi Selatan* (Master's dissertation). Universitas Diponegoro. Retrieved from http://eprints.undip.ac.id/15755/1/Nudiatulhuda_Mangun.pdf
- Mariska, N. H. (2015). Analisis Penentu Sektor Unggulan Pembangunan Daerah dan Strategi Pengembangannya (Studi Kasus di Kabupaten Jembrana Tahun 2010-2014) (Thesis). Yogyakarta, Indonesia: Universitas Muhammadiyah Yogyakarta.
- Pangesti, I., & Susanto, R. (2018). Pengaruh Inflasi terhadap Indeks Pembangunan Manusia (IPM) di Indonesia. *JABE* (Journal of Applied Business and Economic), 5(1), 70–81. https://doi.org/10.30998/jabe.v5i1.3164
- Republik Indonesia. (2002, May 29). Keputusan Presiden Republik Indonesia Nomor 36 Tahun 2002 Tentang Pengesahan ILO Convention No. 88 Concerning The Organization of The Employment Service (Konvensi ILO No. 88 Mengenai Lembaga Pelayanan Penempatan Tenaga Kerja). Retrieved from https://peraturan.bkpm.go.id/jdih/userfiles/batang/Kepres_36_2002.pdf
- Sukirno, S. (2013). Makroekonomi: Teori Pengantar. Depok, Indonesia: Rajawali Pers.
- Tarigan, T. P. (2017). *Analisis Faktor-Faktor yang Mempengaruhi Indeks Pembangunan Manusia di Kabupaten Karo* (Thesis). Universitas Sumatera Utara. Retrieved from http://repositori.usu.ac.id/handle/123456789/946
- Todaro, M. P., & Smith, S. C. (2003). *Pembangunan Ekonomi di Dunia Ketiga* (8th ed., Vol. 2). Jakarta, Indonesia: Airlangga.
- United Nations Development Programme. (n.d.). Human Development Index (HDI). Retrieved from http://hdr.undp.org/en/content/human-development-index-hdi
- United Nations Development Programme. (1990). Human Development Report 1990: Concept and Measurement of Human Development. Retrieved from http://www.hdr.undp.org/en/reports/global/hdr1990
- United Nations Development Programme. (1995). Human Development Report 1995: Gender and Human Development. Retrieved from http://www.hdr.undp.org/en/content/human-development-report-1995

About the Author

Prince Charles Heston Runtunuwu, obtained his Doctoral degree in Economics from Universitas Airlangga, Indonesia, in 2018. The author is an Assistant Professor at the Department of Development Economics, Faculty of Economics and Business, Universitas Khairun, Indonesia.

E-Mail: princecharles@unkhair.ac.id

OPEN ACCESS 610