



Analysis of the Relationship between Economic Development and Happiness Index in Indonesia

Muhammad Ardha Nugraha

Development Economic Study Program, Economics Faculty, Universitas Negeri Semarang

Permalink/DOI: <https://doi.org/10.15294/cr2f6bo8>

Submitted: December 2023; Revised: March 2024; Accepted: June 2024

Abstract

This study aims to analyze the relationship between economic development and the happiness index in Indonesia. The object of this research is 34 provinces in Indonesia in 2014, 2017 and 2021. The analysis method used is panel data regression analysis method with the best model used is the Fixed Effect Model. The results of this study indicate that the economic growth variable has a positive and insignificant effect on the Happiness Index. Inequality, Health, and Environmental Quality Index variables have a significant negative effect on the Happiness Index. The Education variable has a significant positive effect on the Happiness Index. Suggestions given in this study are that the central government and the central government must work together for poverty alleviation, human development, improving access to education and health and evaluating environmental policies so that later it will increase happiness and welfare in society.

Keywords: Happiness Index, Inequality, Life Expectancy, Average Years of Schooling, Environmental Quality Index

How to Cite: Analysis of the Relationship between Economic Development and Happiness Index in Indonesia. (2024). Efficient: Indonesian Journal of Development Economics, 7(2), 126-135. <https://doi.org/10.15294/cr2f6bo8>

© 2024 Semarang State University. All rights reserved

Correspondence Address :

Address: Gedung L2 Lantai 2 FE Unnes

Kampus Sekaran, Gunungpati, Semarang, 50229

E-mail : ardha.nugraha12345@students.unnes.ac.id

INTRODUCTION

(J. Helliwell et al., 2012) in the World Happiness Report says that to determine the level of development through the size of GDP, inflation and others is not enough to describe the welfare of a society but there are other

measures that are not only material measures (monetary-based indicators). Then came a perspective on happiness that presented a personal measure.

Happiness is a concept that refers to a positive emotion felt by each individual. The

happiness perspective is used to determine the level of welfare of a country or region to create a broader measurement in understanding welfare. Measuring the level of happiness is a subjective thing (Pamungkas, 2019). At the international level, the use of happiness measures as an indicator of well-being began at the United Nations (UN) General Assembly in 2011 and then expanded to France, the United Kingdom, Australia, Thailand and Malaysia.

In addition, various countries have used Happiness Indicators to measure their level of welfare. In some developed countries, it is not only to see the level of welfare but also used as a reference indicator in making public policies to achieve national development goals. Meanwhile, in Indonesia itself, the introduction of the Happiness Indicator was started in 2012 and 2013 by the Development Planning Agency (Bappenas).

Then a survey of the level of happiness measurement (SPTK) was conducted three times in 2014, 2017 and 2021 with the approaches used being life satisfaction, affection, and eudaimonia. (Central Bureau of Statistics). According to the World Happiness Report, the happiness levels of Indonesia and several countries in ASEAN can be seen in Figure 1.

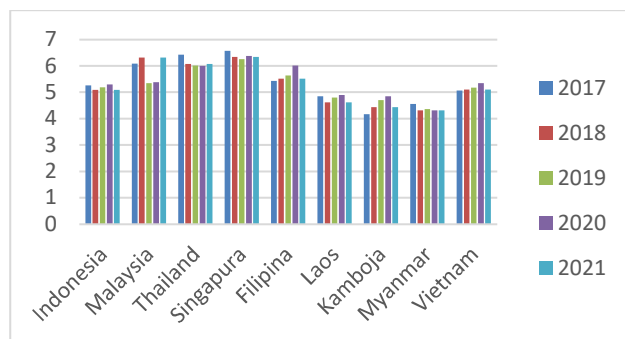


Figure 1. Level of Happiness in ASEAN Countries 2017-2021

Source: World Happiness Report, 2023

At the ASEAN level, it can be seen that from 2017 to 2021 the country with the highest level of happiness is Singapore with a fairly stable graph even though there was a decline. Meanwhile, Indonesia's happiness level tends to fluctuate and decrease in the last year. The calculation of happiness figures used include Gross Domestic Product (GDP) per capita, social support, healthy life expectancy at birth, freedom to make choices in life, generosity and perceptions of corruption.

While the Happiness Index in Indonesia is measured based on 19 supporting indicators which are grouped into 3 constituent dimensions, namely the dimension of life satisfaction, the dimension of feelings (affect) and the dimension of the meaning of life (eudaimonia) The Indonesian Happiness Index can be seen from a scale of 0-100. The higher the index value, the happier the population is. Conversely, the lower the index value, the more unhappy the population is (BPS Indonesia, 2021).

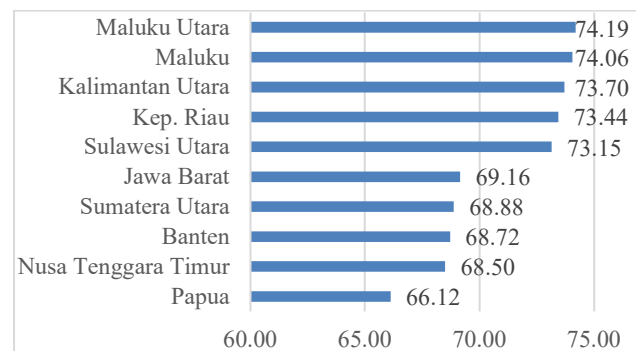


Figure 2. Average Happiness Index 2014, 2017, 2021

Source: Central Bureau of Statistics, 2023

Figure 2 shows that the provinces with the lowest Happiness Index levels are Papua, East Nusa Tenggara, Banten, North Sumatra, and West Java, with an average Happiness Index level ranging from 66 points to 69 points. In

2014, 2017 and 2021, the Happiness Index of 34 provinces in Indonesia experienced mixed conditions with a tendency to increase. Meanwhile, the provinces with the highest Happiness Index values are North Maluku, Maluku, North Kalimantan, Riau Islands, North Sulawesi with index numbers ranging from 73 points to 74.

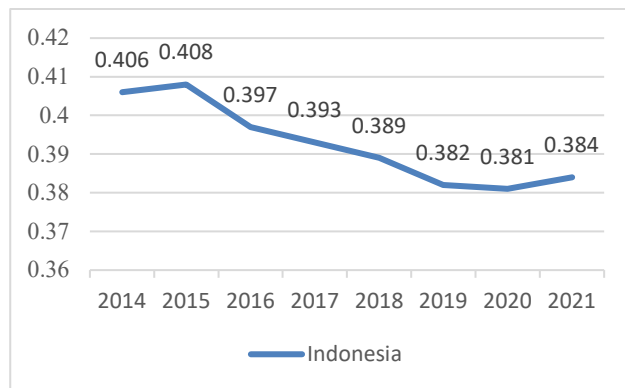


Figure 3. Gini Ratio in Indonesia 2014-2021 (ratio)

Source: Central Bureau of Statistics, 2023

In that year, North Maluku Province became the Province with the highest Happiness Index number with an index value of 74.19 points. There is a study on the relationship between economic growth and the level of happiness conducted by (Easterlin, 1974) The research resulted in the paradox of happiness or income paradox. Then the term is known as the Easterlin Paradox which states that the level of economic growth cannot increase happiness.

The existence of Easterlin paradox shows that there are other factors besides non-material income to influence happiness. However, there are other findings that easterlin paradox does not occur in developing countries because economic growth is still an important element in determining happiness. (Puji, 2016). In addition, the high level of economic growth in a country

or region is not always in line with income equality.

High economic growth but not accompanied by equitable income distribution will cause high inequality as well. This is because only some people can benefit from high economic growth. However, if economic growth is accompanied by equitable income distribution, inequality will be smaller. This condition illustrates that people have equal opportunities to contribute to economic activities.

In Figure 3, it can be seen that inequality in Indonesia has decreased every year, although it increased in 2015 and 2021. The highest Gini ratio value in Indonesia occurred in 2015 with a value of 0.408 and in 2020 it became the lowest Gini ratio value with a value of 0.381 during the period 2014 to 2021.

The development paradigm makes humans the focus and ultimate goal of development, namely the achievement of quality human resources. UNDP, routinely publishes an annual Human Development Report (HDR) which is presented in an index or commonly called the Human Development Index. HDI is an indicator used to measure the success of a country's development and welfare.

UNDP makes HDI measurements using several measures, for example, Life Expectancy (AHH) at birth, which is an average estimate of the number of years a person can live. Furthermore, there is the Average Years of Schooling which describes the number of years used by the population aged 15 years and over in undergoing formal education.

The education aspect is important because it has a correlation if a person is at a high level of education, it will also increase a person to find a job with a high income. (Chen, 2012) said that

the combination of education level and the ability to establish a wide network or cooperative relationship will have a positive and significant impact on happiness.

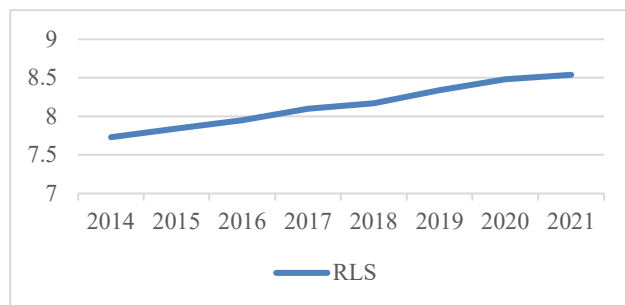


Figure 4. Average Years of Schooling in Indonesia 2014-2021 (percent)

Source: Central Bureau of Statistics, 2023

In Figure 4 the average level of schooling in Indonesia continues to increase every year. With the achievement of an average length of schooling of 8.54 years in 2021. This figure, although increasing, is still below the goal of education policy in Indonesia which requires every child aged 6 - 18 years to carry out formal education for 12 years.

Apart from education, health also has an influence on the probability of individuals to be happier. Health is part of social opportunities to improve people's capabilities. A healthy person will certainly have the ability to manage various resources owned to be able to improve their quality of life. (Pouwels et al., 2008) revealed in his research that health has a significant and positive influence on the level of individual happiness.

Furthermore, (Aryogi & Wulansari, 2016) (Aryogi & Wulansari, 2016) in their research revealed that when healthy conditions must be met in order to carry out their functions properly in the community environment so that it will provide life satisfaction to increase

happiness. This is important in determining individual happiness. Figure 5 shows that the average Life Expectancy in Indonesia in the period 2014 to 2021 has increased with the value of life expectancy in Indonesia in 2021 reaching 71.57. This is indirectly the result of the better quality of health in Indonesia.

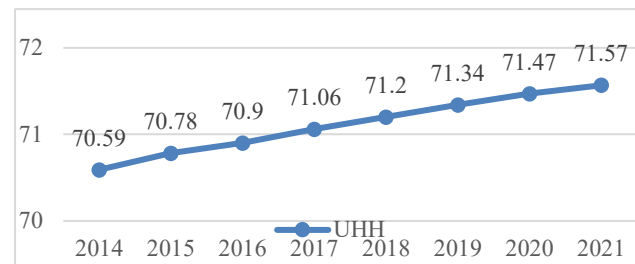


Figure 5. Provincial Life Expectancy in Indonesia 2014-2021 (percent)

Source: BPS Indonesia, data processed 2023

Education and health are related in influencing the happiness index. A good level of education can increase awareness of the importance of health and help individuals make healthier life choices. Conversely, good health can support success in education and employment. Therefore, efforts to improve people's education and health can significantly contribute to an increase in the happiness index in society.

The environmental quality of a country or region is one of the factors that influence the creation of economic development in a country or region. Which is also listed in the Sustainable Economic Development goals or better known as the Sustainable Development Goals (SDGs). Apart from economic and social factors, the environment is also a pillar included in the three main pillars in the SDGs.

This means that indirectly the quality of the environment in a country or region will affect the level of happiness. (Suparta & Malia,

2020) in his research on the happiness index in ASEAN found that Environmental Factors have a positive effect on the level of happiness of countries in ASEAN. This shows that good environmental conditions also reflect the level of happiness. The better the quality of the environment in a country or region, it will increase people's happiness.

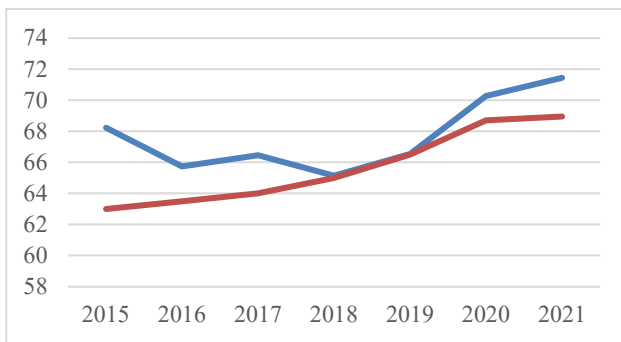


Figure 6. Environmental Quality Index in Indonesia 2015 - 2021 (points)

Source: MoEF Performance Report 2021

The figure 6 contains the value of the Environmental Quality Index in Indonesia in 2015-2020. It can be seen that during this period the environmental quality index in Indonesia has increased and also decreased with a fluctuating line. And in each year, the IKLH figure is always at a level equal to or higher than the IKLH target, meaning that the realization of IKLH in each year can be said to be successful. Achieving happiness is something that is desired by most people in the world.

However, to achieve happiness itself requires each level and taste in interpreting happiness. One thing that makes someone happy does not necessarily make someone else happy. Therefore, happiness is subjective. But being someone who has happiness indirectly affects how they live their lives. And how they obtain the welfare they get. So on the other

hand, the question will arise how to get happiness. Based on the explanation that has been described, it makes the discussion of what factors affect happiness in Indonesia interesting to research.

Furthermore, it can be known what should be done to increase the happiness index in Indonesia. Although the happiness index looks at the subjective side to determine welfare, unlike in general, which uses GRDP or economic growth to describe welfare, I think this needs to be done because it will also see how the picture of happiness in society is formed, through what is lacking so that it can be addressed in a comprehensive and appropriate policy.

This research is entitled "Analysis of the Relationship between Economic Development and the Provincial Happiness Index in Indonesia". (Bruno S., 2008) In his book, he explains that in economics, there are three basic theories that describe the determinants of individual happiness, namely income, individual characteristics (socio-demographics), and macroeconomic conditions.

In the first theory, the factor that affects individual happiness comes from the individual's income level. Frey explains that individuals who have a higher income level will have a greater ability to obtain goods and services and will increase their social status. The next theory states that the level of happiness is influenced by individual characteristics which are divided into employment status, education level, and marital status.

The last theory explains economic conditions consisting of inflation, income distribution inequality, and government policies. (Easterlin, 1974) explained the existence of Set Point Theory in psychology. The existence of a set point or level of happiness will be influenced

by various life events such as marriage, job loss and accidents, in addition, the chest of social comparison, a person will assess the quality of his life relatively and not absolutely by comparing it with others.

When someone gets an increase in salary / income, it will not necessarily increase his happiness because he will compare it with other people's income. (Easterlin & Connor, 2020). (Veenhoven, 1988) also divides happiness theory into three parts, namely, set point theory, cognitive theory and affective theory. In set point theory, happiness is something that has been programmed by a person and is not related to how a person lives.

According to Adam Smith, the process of economic growth consisting of increasing factors of production, population growth, specialization and division of labor, and technological development will occur continuously and will increase economic growth. or character (personal trait), genetics and culture. People will strive to maintain a comfortable level of happiness.

Furthermore, in cognitive theory, happiness is a product of human thinking and reflection on the difference between the perception of life that is actually and should be owned. Happiness cannot be calculated but can be known. And finally in affective theory, happiness is a human reflection on how good his life is in general. (Seligman & Martin E. P., 2002) and (Huang, 2008) states that there are three traditional theories and one modern theory of happiness, namely hedonism, desire, objective list and authentic theory.

Hedonism theory states that happiness is related to efforts to maximize pleasure and minimize pain. It is the experience of positive feelings by individuals. Happy individuals will be

seen smiling often or sparkling eyes. This theory is a modern version of Bentham's utilitarian theory. Furthermore, Desire theory states that happiness is related to the fulfillment of desires. It is said that this theory is better than hedonism.

The fulfillment of desires will be able to increase one's happiness regardless of the pleasure it produces. Furthermore, Objective list theory states that happiness is achieved if individuals are able to fulfill various desired goals such as the fulfillment of material needs, freedom, health, education, knowledge, friendship. Meanwhile, the authentic theory states that happiness is related to three things, namely pleasant life/pleasure, good life and meaningful of life.

The theory combines three previous traditional theories, namely pleasant life related to hedonism, good life related to the fulfillment of individual desires and meaningful life related to the objective list. (Biswas-diener et al., 2004) stated that there are three causes of happiness, namely a person's character, adaptation and social relations. Character, there are two basic characteristics of a person, namely neuroticism and extroversion.

Neuroticism characters tend to be easily angered, guilt and depression. Meanwhile, extroversion characters tend to feel happy, enthusiastic even when they are alone. It is this second character that encourages someone to be happier than the first character. Adaptation, where individuals have the ability to adapt to all conditions. The better the adaptability, the greater the chance of being happier.

And finally, social relations, where having many friends, family support, trusting social relationships and romantic relationships will increase the chances of a happier life. (Graham,

2005) Graham defines it as the Economics of Happiness, which is an approach to assessing well-being that combines techniques typically used by economists with techniques more commonly used by psychologists.

Graham mentions that psychologists have long used economic indicators as an influence on a person's level of happiness but economists are just starting to try to link the two. The keyword happiness here must be underlined. The word happiness has a broad and flexible definition. Happiness is a form of positive feeling due to finding something pleasant or derived from the evaluation of life as a whole.

A person's level of happiness can be influenced by factors within the individual himself or also external factors such as economic, political and social conditions and the surrounding environment. In a paper by Frey & Stutzer, happiness is linked to life expectancy. The economics of happiness combines the techniques of economists and psychology in studying well-being. (Roshidah, 2021).

RESEARCH METHODS

This research is quantitative research. Because, the use of data in this study is in the form of numbers. Quantitative research is a series of systematic investigations of phenomena by collecting data and then measuring it with mathematical or computational statistical techniques (UMSU, 2022). This research uses panel data regression analysis with eight variables, namely Economic Growth, Inequality, Education, Health and Environment as independent variables, and the Happiness Index variable as the dependent variable.

The panel data regression model in this study uses the Happiness Index variable as the dependent variable and uses the GRDP, Number

of Poor People, Gini Index, HDI, Life Expectancy, Average Years of Schooling and Environmental Quality Index variables as independent variables. The model in this study is as follows :

$$IKit = \alpha + b_1 \log PDRBit - b_2 \text{Gini}3it + b_3 \log RLSbit + b_4 \log AHHit + b_5 IKLHit + e_{it}$$

Where α is Constant, IK is Happiness Index, GRDP is Gross Regional Domestic Product (GRDP), Gini is Income Inequality, RLS is Average Years of Schooling, AHH is Life Expectancy, IKLH is Environmental Quality Index, b is Regression coefficient, and e is Error Term.

RESULTS AND DISCUSSION

Table 1 shows the regression results of the Common Effect, Fixed Effect, and Random Effect models which will then be carried out the Chow test, Hausman test, and Lagrange Multiplier (LM) test. The test is conducted to determine the best model among the three.

Table 1. Panel Data Estimation Results

Variabel	CEM		FEM		REM	
	Koef.	Prob.	Koef.	Prob.	Koef.	Prob.
C	-23.58412	0.3797	428.5156	0.0120	-1.209788	0.9688
LOG (PDRB)	-0.512945	0.0222	3.882408	0.0669	-0.311148	0.2095
GINI	-3.777819	0.4694	-19.85626	0.0373	-16.19279	0.0022
LOG (RLS)	9.722160	0.0000	43.45376	0.0000	15.38497	0.0000
LOG (AHH)	17.72277	0.0104	-113.9730	0.0085	10.52488	0.1889
IKLH	0.093391	0.0003	-0.068429	0.0206	0.068346	0.0008
F-statistik	17.04295	0.000000	14.72780	0.000000	19.47333	0.000000
R ²	0.470242		0.898821		0.503534	
Adjusted R ²	0.442650		0.837792		0.477676	

Source: Eviews 9 output, 2023

Table 1 shows the regression results of the Common Effect, Fixed Effect, and Random Effect

models which will then be carried out the Chow test, Hausman test, and Lagrange Multiplier (LM) test. The test is conducted to determine the best model among the three.

Table 2. Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	8.086588	(33,63)	0.0000
Cross-section Chi-square	168.863622	33	0.0000

Source: Eviews 9 Output, 2023

In table 2, the results of the chow test using eviews 9 are obtained, namely a probability value of 0.0000, so that it can be declared significant because it is less than the significance value of 5%. From these results, the best model chosen is the fixed effect model.

Table 3. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section Random	95.73850	5	0.0000

Source: Eviews 9 output, 2023

In table 3, the results of the Hausman test using eviews 9 are obtained, namely a probability value of 0.0000, so that it can be declared significant because it is less than the significance value of 5%. From these results, the best model chosen is the fixed effect model.

The test results from the chow test and Hausman test show that the Fixed Effect Model is the best model in this study, so the Lagrange Multiplier test does not need to be done and it has been determined that the Fixed Effect Model is the chosen model.

From the regression model, a constant of 428.5156 is obtained. This means that without the influence of the GRDP, Gini Index, Average Years of Schooling, Life Expectancy, and Environmental Quality Index (IKLH) variables, there will be a change in the level of happiness index in Indonesia by 428 percent. Another interpretation that explains the relationship of each independent variable to the dependent is also seen from the coefficient value.

Table 4. Fixed Effect Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	428.5156	65.6963	2.586151	0.0120
LOG(PDRB)	3.882408	2.082428	1.864366	0.0669
LOG(GINI)	-19.85626	9.333804	-2.127349	0.0373
LOG(RLS)	43.45376	8.046234	5.400509	0.0000
LOG(AHH)	-13.9730	41.93780	-2.717667	0.0085
LOG(IKLH)	-0.068429	0.028807	-2.375410	0.0206
R-squared		0.898821		
Adjusted R-squared		0.837792		
F-statistic		14.72780		
Prob(F-statistic)		0.000000		

Source: EViews 9 Output, 2023

Based on the estimation results in Table 4, the resulting econometric model is as follows:

$$IK = 428.5156 + 3.882408 \log PDRB_{it} - 19.85626 \text{ GINI}_{it} + 43.45376 \log RLS_{it} - 13.9730 \log AHH_{it} - 0.068429 \text{ IKLH}_{it}$$

Based on the estimation results that have been carried out using panel data and the Fixed Effect Model (FEM) approach in 2014, 2017 and 2021, it shows that the GRDP variable which describes economic growth has a positive and insignificant effect on the growth of the Happiness Index in 34 provinces in Indonesia. This is because the probability value obtained is 0.0669 or greater than 0.05, while the coefficient

obtained is 0.029150. Based on the estimation results that have been carried out using panel data and the Fixed Effect Model (FEM) approach in 2014, 2017 and 2021, it shows that the Gini Index variable as a depiction of income inequality has a negative and significant effect on the growth of the Happiness Index in Indonesia.

The estimation results show that the coefficient on the Gini Index variable shows a value of -19.85626. This means that every increase in the Gini Index by 1 index will result in a decrease in the Happiness Index by 19.85 indexes with the assumption of *Ceteris Paribus*. The Gini Ratio variable has a significant effect because the probability results show $0.0373 < 0.05$.

Based on the estimation results that have been carried out using panel data and the Fixed Effect Model (FEM) approach in 2014, 2017 and 2021, it shows that the Average Years of Schooling variable has a positive and significant effect on the growth of the Happiness Index in Indonesia.

The estimation results show that the coefficient on the Average Years of Schooling variable shows a value of 43.45376. This means that every increase in Average Years of Schooling by 1 percent will result in an increase in the Happiness Index by 43.45 indices assuming *Ceteris Paribus*. The Average Years of Schooling variable has a significant effect because the probability results show $0.0000 < 0.05$.

Based on the estimation results that have been carried out using panel data and the Fixed Effect Model (FEM) approach in 2014, 2017 and 2021, it shows that the Life Expectancy variable has a negative and significant effect on the growth of the Happiness Index in Indonesia.

The estimation results show that the coefficient on the Life Expectancy variable shows a value of -113.9730. This means that every increase in Life Expectancy by 1 percent will result in a decrease in the Happiness Index by 113.97 indices with the assumption of *Ceteris Paribus*. The Life Expectancy variable has a significant effect because the probability results show $0.0085 < 0.05$.

Based on the estimation results that have been carried out using panel data and the Fixed Effect Model (FEM) approach in 2014, 2017 and 2021, it shows that the IKLH variable has a negative and significant effect on the growth of the Happiness Index in Indonesia. The estimation results show that the coefficient on the IKLH variable shows a value of -0.068429.

This means that every increase in the IKLH by 1 index will result in a decrease in the Happiness Index by 0.06 indexes with the assumption of *Ceteris Paribus*. The IKLH variable has a significant effect because the probability result shows $0.0206 < 0.05$. From the coefficient value obtained, it shows a negative relationship direction and is not in accordance with the initial hypothesis.

CONCLUSION

The GRDP variable which describes Economic Growth has a positive and insignificant effect on the Happiness Index in 34 provinces in Indonesia. This means that any increase in GRDP will increase the Happiness Index in Indonesia. The Gini Index variable which describes the level of inequality has a negative and significant effect on the Happiness Index in 34 provinces in Indonesia. This means that any increase in the Gini Index will reduce the Happiness Index in Indonesia.

The Average Years of Schooling variable which describes the level of education has a positive and significant influence on the Happiness Index in 34 provinces in Indonesia. This means that any increase in Average Years of Schooling will increase the Happiness Index in Indonesia.

The Life Expectancy variable which describes the level of health has a negative and significant effect on the Happiness Index in 34 provinces in Indonesia. This means that every increase in Life Expectancy will reduce the Happiness Index in Indonesia.

The Environmental Quality Index variable (IKLH) has a negative and significant effect on the Happiness Index in 34 provinces in Indonesia. This means that every increase in the Environmental Quality Index will reduce the Happiness Index in Indonesia.

REFERENCES

- Aryogi, I., & Wulansari, D. (2016). Subjective Well-being of Individuals in Households in Indonesia. In *Journal of Applied Economics* (Vol. 01, Issue 1).
- Biswas-diener, R., Diener, E., & Tamir, M. (2004). Robert Biswas-Diener, Ed Diener & Maya Tamir. *Psychological Bulletin*, May, 18-25.
- Bruno S., F. (2008). *Happiness: A Revolution in Economics*.
- Chen, W. chi. (2012). How Education Enhances Happiness: Comparison of Mediating Factors in Four East Asian Countries. *Social Indicators Research*, 106(1), 117-131. <https://doi.org/10.1007/s11205-011-9798-5>
- Easterlin, R. A. (1974). Does Economic Growth Improve the Human Lot? Some Empirical Evidence. In *Nations and Households in Economic Growth* (pp. 89-125). Elsevier. <https://doi.org/10.1016/b978-0-12-205050-3.50008-7>
- Easterlin, R. A., & Connor, K. J. O. (2020). *The Easterlin Paradox*. 13923.
- Furwanti, R., Lestari, D. M., Muflikha, M., & Wibowo, M. G. (2021). Determinants of Macro-Economics: Does Income Inequality Influence Happiness? Evidence From Indonesia. *TRACE*, 14(1), 146-156. <https://doi.org/10.15294/jejak.v14i1.28278>
- Graham, C. (2005). The Economics of happiness: Insights on globalization from a novel approach. *World Economics*, 6(3), 41-55.
- Helliwell, J. F., & Hall, J. (2014). *Happiness and Human Development UNDP Human Development Report Office Happiness and Human Development*. <https://www.researchgate.net/publication/320724829>
- Helliwell, J., Layard, R., & Sachs, J. (2012). *World Happiness Report*. <https://doi.org/10.3126/jucms.v1i101.54662>
- Huang, P. H. (2008). Authentic Happiness, Self Knowledge and Legal Policy. *Minnesota Journal of Law, Science & Technology*, 9(2), 755-784.
- Leigh, A., & Wolfers, J. (2006). *Happiness and the Human Development Index: Australia is Not a Paradox*. <http://www.nber.org/papers/w11925>
- Pamungkas, B. (2019). Population Happiness in West Java Province. In *JISPO* (Vol. 9, Issue 1).
- Pouwels, B., Siegers, J., & Vlasblom, J. D. (2008). Income, working hours, and happiness. *Economics Letters*, 99(1), 72-74. <https://doi.org/10.1016/j.econlet.2007.05.032>
- Prihatini, T. (2018). The Happiness And Human Development: Uniqueness Of Indonesia Paper. *International Journal of Advanced Research*, 6(6), 810-818. <https://doi.org/10.21474/IJAR01/7279>
- Puji, T. (2016). *Determinants of Happiness in Indonesia* (Vol. 19, Issue 1).
- Roshidah, U. (2021). The Effect of Per Capita Income, Inflation and Human Development Index on Happiness Index in Asean-5. In *Digital Repository University of Jember* (Issue September 2019).
- Seligman, & Martin E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*.
- Suparta, I. W., & Malia, R. (2020). Comparative Analysis of Happiness Index 5 Countries in Asean. *Journal of Development Economics*, 9(2), 56-65. <https://doi.org/10.23960/jep.v9i2.79>
- Veenhoven, R. (1988). The utility of happiness. *Social Indicators Research*, 20(4), 333-354. <https://doi.org/10.1007/BF00302332>