THE DETERMINANT OF HAPPINESS IN THE WORLD IN 2016

A THESIS

Presented as Partial Fulfillment of the Requirements to Obtain the Bachelor Degree in Economics Department

By:

Alfarabi Syeh Albar

Student Number: 14313141

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INTERNATIONAL PROGRAM
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A BACHELOR DEGREE THESIS

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Defended before the Board of Examiners

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DECLARATION OF AUTHENTICITY

Hereby I declare the originality of the thesis; I have not presented someone else's work to obtain my university degree, nor I have presented someone else's words, ideas or expressions without any of the acknowledgments. All quotations are cited and listed in the bibliography of the thesis. If in the future this statement is proven to be false, I am willing to accept any sanction complying with the determined regulation or its consequence.

Yogyakarta, March 20th, 2018

Author,

Alfarabi Syeh Albar

MOTTOS

“So verily with the hardship there is relief, verily with the hardship there is relief”

(Quran, 94:5-6)

“Allah does not burden a soul beyond that it can bear”

(Quran, 2:286)

“A person who never made mistake never tried anything new”

(Albert Einstein)

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Alfarabi Syeh Albar

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ABSTRACT

This study aims to determine the influence of religion, life expectancy, education, family, GDP per capita, and population on happiness. The population of this study is all countries in the world with a sample of 141 countries with estimated values and 79 with real values. The sampling method in this study was using the purposive sampling method. The method of data analysis in this study is crsoss section regression analysis. The results of this study prove that life expectancy and GPD Per capita have a positive and significant influence on Happiness.

Key words: ***Religion, Life Expectancy, Education, Family, GDP per capita, Population, World Happiness Index.***

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh agama, angka harapan hidup, pendidikan, keluarga, PDB per capita, dan populasi terhadap kebahagiaan. Populasi dari penelitiaan ini adalah seluruh negara didunia dengan sample 141 negara dengan nilai estimasi dan 79 dengan nilai real. Metode pengambilan sample dalam penelitian ini adalah menggunakan metode purposive sampling. Adapun metode analisis data dalam penelitian ini adalah analisis regresi cross section. Hasil penelitian ini membuktikan bahwa angka harapan hidup dan PDB per capita memiliki pengaruh positif dan signifikan terhadap Kebahagiaan.

Kata kunci: ***Agama, Angka Harapan Hidup, Pendidikan, Keluarga, PDB per capita, Index Kebahagiaan Dunia.***

CHAPTER I

INTRODUCTION

1.1 Background

Human is an important resource of a nation among other resources. Sen (2006) initiated the concept of development through the concept of the Human Capabilities Approach that emphasizes the idea of human capabilities as a central theme of the development. Development is the main thing in measuring welfare and happiness creates an environment that allows people to enjoy a long, healthy also creative life.

In addition, human development also requires economic growth which can be seen from a country's GDP per capita indicator. Because, without economic, there will be no sustainable improvement in human welfare. Development is often interpreted as an effort to achieve a sustainable level of per capita income growth in order to achieve an increase in output in an economy is faster than the rate of population growth (Todaro, 2012). Initially, economic development is defined as a continuous increase in Gross Domestic Bruto or Gross Domestic Product of a country.

Over time, the development has experienced redefinition. in the late 1960s, many countries began to finally realize that economic growth was not the same as economic development. Although countries achieve high economic growth, this growth was also accompanied by other problems such as unemployment, poverty, unequal income distribution, and structural instability (Kuncoro, 2004). Economic growth only records an increase in

national productions of goods and services, while economic development has a wider dimension than just increasing economic growth. Therefore, a number of opinions emerged regarding development that began to change. This definition emphasizes the ability of a country to increase output than exceed population growth.

In UNDP (1990) in its report "Global Human Development Report" introduced the concept of "Human Development" as a new paradigm of the development model. This concept shows that the main goal of development is to benefit humans – society, then high national income the growth does not directly guarantee human development because sometimes only prioritizes the political and economic elite.

The United Nations Development Program (UNDP) defines the Human Development Index (HDI) as a composite index that measures the average achievement in the three basic dimensions of human development. The dimensions in question include opportunities for life (longevity), education (knowledge), and good living standards (living standards). To date, this new index is used to measure the success or performances of human development in a region (UNDP, 1990). The best way to achieve human development is to improve the equitable economic growth and encourage participatory development, which involves the community in direct development as the subject of the development. In 1991 Human Development Report, it was said that the lack of political commitment in a country was the main cause of human development failure. Nine years later, UNDP in the publication of the

2010 Human Development Repost still argues that political commitment from the government still has an important role in creating regulations that support the success of human development.

Based on the explanation of the shift in the meaning of development above, it can be concluded that development is not merely directed towards economic growth, but development also has a broader dimension and is directed to achieve social goals, such as poverty alleviation, unemployment, and income distribution. Countries that accommodate development paradigms with human dimensions have been able to develop even though they do not have an abundant wealth of natural resource (Kuncoro, 2004). Myrdal (1971) also mentioned that with investment in humans, such as increasing spending on health it can increase total productivity.

Muchdie & Hartono (2016) in their study of inter-country analyzed the relationship (by calculating correlation coefficient) and influenced (by calculating the path coefficient) economic development with happiness. Path analysis shows that directly, economic growth has a negative and significant effect on happiness. Indirectly, the effect of economic growth on happiness depends on the path through it. If only through global competitiveness variables, the effect will be positive and significant. However, if it is done by human development path, the effect will be negative because the influence of economic growth on human development is negative, but not statistically significant. Human development, human-focused development as measured by the human development index, has a very strong positive relationship with

happiness. Economic growth is not the only important factor in achieving global competitiveness and achieving happiness. Human development, with its three indicators: education health and purchasing power are important prerequisites for global competitive advantage to obtain and maintain happiness.

All activities carried out by humans certainly have a purpose that is to obtain happiness. Happiness is the main goal of human existence in the world (Aristotle, 2004). Happiness itself can be achieved by fulfilling the needs of life and there are many ways taken by each individual. Happiness can bring individuals to individuals who have a healthy soul, build a source of strength, and recover from negative experiences (Lopes, S. J. 2009).

Happiness is a measure of development other than economic growth as described earlier. In this regard, the UN invites member countries to measure the happiness of the people in these countries and use the data to help guide public policy. In the World Happiness Report (2012) was first launched in conjunction with the United Nation Summit on Happiness and Welfare led by the prime minister of Bhutan.

The report contains the condition of world happiness, causes and policy implications. In 2013 the second report was published, which is subsequently published every year. Simultaneously with World Happiness Day, on the 20th of March 2016 the World Happiness Report 2016. Indonesia ranked 79th out of 157 countries. Approximately, the level of happiness of the Indonesian people is in the midst of the level of happiness of the world community every

year with the exception of 2014. This report mainly uses data from the Gallup World Poll. Each annual report is available to the public and downloadable on the World Happiness Report website.

The World Happiness Report was published in 2012, 2015, 2016 (renewal), 2017 and 2018. In addition to the level of happiness and well-being of ranking countries, each report has contributed to the author and is mostly focused on the subject. The data used to rank countries in each report are taken from the Gallup World Poll, as well as other sources such as the World Values Survey, in several reports. The Gallup World Poll questionnaire measures the area of the core question: business and economics, citizen involvement, communication and energy, food and shelter, government and politics, law and order (safety), (healthy), religion, ethics transportation, and work.

Human development that is based on measurement from the Human Development Index is fundamentally always related to material to measure happiness in human or a country. In this case human development in the perspective of Islam is presented as something different and unique to measure human development compared to conventional human development which is on the basis of its fundamentals. According to Anto (2009) in a journal entitled Introducing an Islamic Human Development Index (I-HDI) to measure development in OIC Countries, said that the existing Human Development Index (HDI) published by UNDP might be the most comprehensive indicator, but not fully compatible and adequate to measure

human development from an Islamic perspective. The underlying theory and concept for developing HDI are not based on *Maqashid al-Shariah*. Measuring the level of human development in Muslim countries will be more in line with using a particular Islamic Human Development Index (I-HDI).

The measurement of happiness cannot be separated from the view of Islam according to Iman Al-Ghazali (1966) in his thought that *Maqashid Shariah* is the objectives of the sharia and secrets intended by Allah in every law of the whole law. The essence of the goal of sharia is to realize benefit for humans and eliminate the mudhorat, while maabadi (basic principle) is to pay attention to the basis values of Islam. Such as equality of justice and independence. In his thinking Iman Al-Ghazali divided the benefit into five such as:

1 Upholding Religious Value (*Hifdz Ad-Din*) means become haq attadayyun (religious rights), namely the right to worship and carry out religious teachings. This right is not only to always maintain the sanctity of religion, but also to build worship facilities and create a healthy relationship pattern in carrying out religion, both among fellow religions or people of different religions.

2 Sustaining the Soul (*Hifdz An-Nafs*) means become haq alhayat (right of life). This right is not just as a tool for self-defense. This right should be directed at creating a better quality of life for ourselves and society. The right to life must be oriented towards improving the quality of human life as a whole, not partially.

3 Nurturing Mind (*Hifds An-Aql*) is haq al-ta'lim (the right to get education) Respect for reason does not mean just maintaining the ability of reason not to be crazy or drunk. The sense of safeguard orientation is the fulfillment of intellectual rights for every individual in society.

4 Maintaining Property (*Hifds Al-Mal*) namely haq al-amal (the right to work). This right can also be interpreted as a person's right to obtain property in a lawful way, work. In a broad sense, this right gives someone the authority to open jobs for others. Thus, everyone can taste the property rights in their lives to get a quality of life that is prosperous.

5 Maintaining Honor (*Hifds An-Nasl*) means become haq al-intirom al-insani (the right to human dignity). Not only are there a number of attempts to look after families and families from other people's accusations and slander also forbidden adultery and accuse people of commit adultery. Conservation and culture are the most important part of maintaining the dignity and dignity of the community. In the broader context, keep dignity and state are included in the analysis of honorary rights.

The development or development economic must be consistent with this central goal of Shariah. Enrichment of faith (*Ad-Din*), Human Self (*An-Nafs*), intellectual (*Al-Aql*), grandchildren (*An-Nasl*) and wealth (*Al-Mal*) must be the main focus of all human efforts and development. Fulfillment of these five basic needs will be a condition for achieving prosperity and living happily in the world and the hereafter called *falah*. Welfare in worldly life is temporary,

while welfare in the eternal and permanent hereafter (Qur'an, 87: 16-17,9:38), so falah is a comprehensive and holistic concepts of human welfare (Qur'an, 2:201, 28:77)

There is a positive relationship between religiosity and happiness, namely religious people who are happier and more satisfied with their lives than individuals who are not religious (Rahman P.A & Siregar R.H. 2012). Religious people will feel more relaxed than who are less religious. This because in the presence of religion, individual have a clear grip on life, so it is not easily collapsed with the problems faced.

Human are creatures that created with mind and heart. This makes humans always strive to happiness. Hurlock, E. B. (1997) states that happiness arises from fulfillment needs or expectation and is a cause or means to enjoy. Happiness ca be achieved if the needs and expectation and is a cause or means to enjoy. Happiness can be achieved if the needs and expectation can be achieved. Through this fulfillment, individuals will get satisfaction as a sign of happiness. The satisfaction that is felt makes the individual can enjoy his life calmly and peacefully.

Life is also considered necessary to determine the happiness of an individual. This life expectancy is influenced by health. The health that is said to effect happiness is the health perceived by individuals to how healthy the individual is. In addition, people who are happy have a longer life span because happiness protects human physical health (Veenhoven, Ruut. 2006). Life satisfaction slightly increase with age. Feelings of reaching the peak and

falling into despair in the lives of individual are diminished with age and experience. The feeling of happiness that will be experienced with others in childhood and the influence of cultural stereotypes.

Important factors in influencing happiness can also be related to the level of education in nation while education generally means the effort to promote growth of character (inner strength of character), mind (intellectual and growing children): in the Park students cannot be separated so that so that we expose the perfection of life, life and the livelihood of our children, in harmony with the world (Dewantara, 1977). From the etymology and analysis of the understanding of education, in short education can be formulated as a guide to human growth from birth to physical and spiritual maturity, in interaction with nature and the community.

Family and birth rate as the basis for measuring in the family is one of the important factors in influencing the happiness of each individual. Married individuals tend to be happier than unmarried ones. Married individuals tend to be happier than unmarried. People happier and married can be caused by marriage providing psychology and physically and physically intimacy, the context for having children, building a household, and affirming identity and social roles as a partner and parent (Carr, Alan. 2004)

GDP per capita (Gross Domestic Product) is also a factor or other dependent variable. GDP is also described as a property owned by each individual. According to (Hurlock, E. B. 1997) that happiness is influenced by several factors, namely as follows: happiness is not only from the amount of

price but, can come from a sense of ownership of what is owned. Besides that, a sense of gratitude for what is owned will make someone happy more. In addition to Puspitorini Y.W. (2012) also describes several factors that affect a person's happiness, namely: In general, individuals who earn enough or even more income will feel happiness and income also makes an individual feel valuable.

An important factor in influencing happiness is the first, namely the population is the total of all possible values, the results of calculating or measuring, quantitative or qualitative about a certain characteristic of all members of a complete and clear collection of what they want to learn about their properties (Sudjana, 2005). According to Arikunto, Suharsimi (2006) the population is generalized area consisting of objects/subjects that have certain quantities and characteristic set by the research to be studied and then drawn a conclusion. From this definition, the population of this study is SSB Mulyojati Metro Students.

1.2 Problem Formulation

Based on the background of the problems described above, the formulation of the problem in this study is as follows:

1. Is there any influence of religion on World Happiness?
2. Is there any effect of Life Expectancy on World Happiness?
3. Is there any influence of Education on World Happiness?
4. Is there Family influence on World Happiness?
5. Is there any effect of GDP per capita on World Happiness?

6. Is there population influence on World Happiness?

1.3 Research Objectives

The objective of this study are as follows:

1. To analyze the influence of Religion on World Happiness?
2. To analyze the effect of Life Expectancy on World Happiness?
3. To analyze the influence of Education on World Happiness?
4. To analyze the influence of the Family on World Happiness?
5. To analyze the effect of GDP per capita on World Happiness?
6. To analyze the influence of the population on World Happiness?

1.4 Research Contribution

Through this research is expected to provide the following benefits:

1. For Researcher, it is expected to provide experience and implementation of knowledge about the way of writing scientific papers and provide deeper insight into the World Happiness.
2. For research-related development, it can be used as one of information for research in the next period related to the World Happiness.
3. For the government, this research will be a reference in government policy-making to determine the determinants of Happiness at the world level in order to take appropriate policies in the future.

1.5 Writing Systematics

To simplify and clarify the writing of this thesis, the researcher uses systematics of writing so that it is more focused. It will be divided into five chapters they are:

CHAPTER I: INTRODUCTION

This chapter contains the background of the study, problem identification, problem formulation, problem limitation, research objectives, research contributions, writing systematics.

CHAPTER II: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter describes the study of the results of research ever done in the same field as well as load the foundation of theory used to approach the issues that will be examined.

CHAPTER III: RESEARCH METHOD

This chapter describes the data collection method, research variables and elaborates the method of analysis and data source that is used.

CHAPTER IV: DATA ANALYSIS & DISCUSSIONS

This chapter discusses data analysis, hypotheses testing, and research findings.

CHAPTER V: CONCLUSIONS & RECOMMENDATIONS

This chapter presents the conclusions, and recommendations for future researchers.

CHAPTER II

LITERATURE REVIEW

2.1 Literature Review

The Happiness of a country has been investigated by many researchers, referring to this to determine the variables and analysis of this study requires prior research.

In the study of Wang et al. (2012) entitled "Can Well-being Measured Using Facebook Status Updates? The Validation of Facebook's Gross National Happiness Index "says that Facebook's Gross National Happiness (FGNH) Facebook indexes positive and negative words used in millions of status updates sent daily by Facebook users. FGNH has face validity: this shows the weekly cycle and increases on national holiday. Also, Happier people use more positive words and fewer negative words in their status of renewal (Kramer, A. 2012). We tested the validity of FGNH in measuring mood and well-being by comparing it with the Diener's Satisfaction with Life Scale (SWLS) score, given to an average of 34 Facebook users every day for a year, then collected by day, week, month, quarter, and half year. FGNH and SWLS did not correlate significantly, with a negative correlation coefficient. Also, the aggregate SWLS score shows a positive relationship with a number of negative words in the status update. We conclude that FGNH is a valid measure for mood and well-being; However, it might play the role of setting

the mood. This challenges the assumption that linguistic analysis of internet messages is related to the underlying psychological conditions.

In the study of Eid (2014) in a study entitled "Comparative Latent State Trait Analysis with Life Measures: The Steen Happiness Index and the Satisfaction with Life Scale" said that differences in satisfaction with life can be broken down into components and components. We run tests to determine whether a new scale for satisfaction measurement with life, the Steen Happiness Index (SHI), is more sensitive to situational. We run tests to determine whether a new scale for satisfaction measurement with life, the Steen Happiness Index (SHI), is more sensitive to situational changes than Satisfaction than Satisfaction with Life Scale (SWLS), which is currently used as a gold standard, with well-established characteristic of state-trait. The study consisted of 292 young adults aged 18-35, who are recruited and interviewed three times at five-month intervals in their place of residences. They completed a set of questionnaires involving SHI and SWLS. The results of this study explain that there are differences in satisfaction with life that can be broken down into the nature and condition of components, namely on the Life Scale (SWLS) and SHI.

Research conducted by Cloutier et al. (2014) in a study "The Sustainable Neighborhoods for Happiness Index (SNHI): A metric for assessing a community's sustainability and potential influences on happiness "that this study describes the development of a Sustainable Environment for Happiness Index (SNHI): a tool for assessing and comparing how well each city,

environment and community embrace sustainable practices and how these practices translate into opportunities for residents to pursue happiness. SNHI is based on findings from the primary literature and previous studies that suggest an association between aspects of sustainable development and higher level of self-reported happiness. Nine community development subsystems were chosen for SNHI generations: water management, energy management, urban design, food management, business & economic development, waste management, building & infrastructure, transportation and community development. The SNHI score is generated for sixteen US cities with data collected from the Green City Index (2011) and US City Ranking Sustain Lane (2007). A method was then developed to produce a Sustainable Environment for Happiness Distribution (SNHD) to plan SNHI, while Detroit has the lowest and that Athens is just below and that only above the average SNHI on SNHD. SNHI can function as a unique tool for decision makers, community stakeholders, engineers, developers, architects, planners, and researchers to assess the relative status of each environment or community, in relation to development and happiness.

According to Maharani (2015) in a study entitled "The level of Happiness of students of the Faculty of Education Yogyakarta State University" states that this study aims to determine the level of happiness of students of the Faculty of the Education Yogyakarta State University. This study uses a descriptive quantitative approach to the type of survey research. Subjects in this study were 1025 students of the 2011 Faculty of Education,

with a sample of 2011 class students, in addition to the main research subjects, 206 students. The sampling technique in this study were 1025 students of the 2011 Faculty of Education, with a sample of 2011 class students, in addition to the main research subjects, 206 students. The sampling technique in this study using simple random sampling technique. The data collection tool uses a modified happiness level scale from the Subjective Happiness Scale and Satisfaction with life Scale. Data analysis technique used are non-parametric statistical analysis. The results showed that level of happiness in the students of the Faculty of Education in UNY was in the medium category with a percentage of 57.7% or a number of 119 students. Judging from the affective aspect, happiness in students of the Faculty of Education in UNY has moderate category of 126 students or 61.2% consisting of 45 (21.8%) male students and 81 (39,3%) female students. While based on cognitive aspects, it has moderate category, which is as many as 38 male students or 18% and 73 female students as 35%.

According to the research conducted by Strootman & Volkert (2018) with study of "Multidimensional Poverty Index and Happiness". As for the results of this study said in recent years, the concept of income has been criticized for being too narrow to capture human welfare. Broader and subjective 'objective' capability approach Wellbeing analysis has been highlighted as the most prominent approach that allows an assessment of income well-being. Recently, a combination of abilities and subjective welfare approaches have been recommended to strengthen welfare analysis. These

results suggest that ‘relativity’ towards other villagers is very important for happiness. Especially from happiness. The perspective of our findings shows the need to integrate indicators of financial deprivation and subsequently “missing dimensions” of seizure into Multidimensional poverty in household and individual levels.

The research conducted by Musaa (2017) in his research entitled “subjective well-being through strategic urban planning: Development and application of community happiness index” states that sustainable development is practiced globally as a comprehensive strategy to promote urban sustainability and prosperity. Achieving sustainable development goals depends on being able to monitor human well-being to track policy outcomes and the relationship between ecosystems and human well-being. We develop a community happiness index (CH-index) framework that fully integrates the broad domain of sustainability – human well-being and the environmental welfare sub-index along with four dimensions of sustainability (social, economic, environmental, and municipal governance) to capture individual subjective perceptions of experience they are about community and development impacts. This model was developed by combining constituents using linear aggregation techniques based on subjective weights using the Delphi technique. A cross-sectional survey was conducted to validate the application of the framework using a case study approach. The results show that the Putrajaya case study showed good performance from environmental welfare (M = 7,313) and Human Welfare (M = 6,534), moderate

sustainability, and middle-high level of happiness (6.866) on scale of 1-10. The findings reveal that the level of happiness of the community depends on the level of sustainable happiness of the community depends on the level of sustainable urban development. The CH-index provides planners with new subjective well-being tools to help in-depth analysis for more targeted interventions and basic data to increase people's happiness.

According to Amalia & Nurpita (2017) in a study entitled 'Analysis of the Happiness Index of People in 33 Province in Indonesia" Happiness is one indicator that can represent the welfare of the community. This study aims to analyze the happiness index by looking at the effects of the Human Development Index (HDI) in 33 provinces in the dimensions of happiness index 2014 and 2017. Four variables used were sourced from the Central Statistical Agency (BPS) in 2014 and 201, namely the happiness index, HDI, per capita GRDP variable, and population density. By using the Ordinary Least Square (OLS) method, the results showed that of that the three independent variables observed, namely HDI, per capita GRDP, and population density, only HDI had a significant effect on the happiness index. Where if the HDI rises, the happiness index of the population in 33 provinces in Indonesia will also increase, and vice versa if the HDI falls then the index of happiness will also decrease. However, simultaneously the three variables significantly influence even though the model used can only explain the happiness index with small percentage / not strong. With the Paired Sample T-test method, the results of the analysis show that changes in the dimensions of

the happiness index compiler 2017 have a significant effect on the average index of happiness in 33 provinces in Indonesia.

According to Rahadika (2017) in the study entitled "Measurement of Happiness Index Using Analysis of Sentiment on Social Media with the Naïve Bayes Classifier Method' states that in his thesis of the word "happiness" is often something that is blurred and very difficult to measure. If someone is asked 'how happy are you?', then the answer that appear are very diverse, because each person has different way of interpreting the meaning of happiness. Some experts in the world define happiness as "subjective well-being" so that there is no meaning ambiguity. The difficulty of measuring happiness is not that happiness cannot be measured. In the happiness index measurement methodology published by BPS Indonesia, happiness is measured in the composite index using a survey that includes 10 domains / variables. On the other hand, Indonesia internet penetration shows numbers that cannot be ignored. Based on the data obtained that almost all Indonesian one the social media that is accessed is twitter, which ranks 5th (7,2 million people) among other social media. Based on these data, another approach can be made as an alternative for measuring happiness indexes, one of which is the conventional approach to happiness index measurement of cost reduction, reduction of time, and also the reduction of energy released because measurements do not require surveys and data can be retrieved easily and quickly through sentiment on social media. In this lesson, this study wants to contribute to the progress of this approach by calculating the happiness index

using the Naïve Bayes Classifier method. Naïve Bayes Classifier users are chosen because this classification method is quite widely used in conducting analysis and text mining sentiments. The results of this study are expected to be able to provide comparison and add literature in the development of a happiness index approach through sentiment analysis.

In study conducted by Munawir et al. (2018), entitled "Comparison of Livable City of Three Cities through Indonesian Social Media and Urban Structure Index of Happiness Data", said that social media has contributed to providing information from users. Users can express and share their thoughts and opinions on all types of topics and even free. Twitter offers organizations a fast and effective way to monitors users feeling about their moods in cities. On twitter there are large information data that can be downloaded freely, his study collects data from twitter and makes a classification based on user tweets to categorize the city's happiness index. City structure data is collected from urban development guides from each city. The happiness index becomes a paradigm of the level of welfare of a city, a tool to assess and compare how cities can live. This study will analyze the user tweets regularly in three cities in Indonesia, becoming a parameter of happiness that will be compared with the development of the city structure. Based on happiness index data from social media can offer better information for urban planners and developers who can be used to improve the planning and quality of life in cities and the future of urban development.

2.2 Theoretical Framework

2.2.1 Development

Humans are an important resource of a nation among other resources. Sen (2006) initiated the concept of development through the concept of the Human Capabilities Approach that emphasizes human capabilities as a central theme of development in this case human development is the thing in measuring welfare and happiness also for creating an environment that allows people to enjoy a long, healthy and creative life.

The development according to some expert, that is developed according to Rochajat, et al (2011) is a useful change towards a social and economic system that is decided as the will of nation. Furthermore, according Rostow (2004) development is a process that moves in a straight line, that is, from under developed communities to developed countries. Development was initially used in the sense of economic growth. A community is considered successful in carrying out development if the economic growth of the community is quite high. Thus, what is measured is the productivity of the community or the productivity of the count each year (Rochajat, et al: 2011).

The concept of human development was discussed by UNDP for the first time in the contemporary era in the 1990 Human Development Report. This concept shows that the main goal of development is to benefit human being, so high national income and growth do not directly guarantee human

development, because sometimes only concerned with the political and economic elite. The idea of human development model is to create an environment that allows people to enjoy a long, healthy and creative life. UNDP provides the following definitions: Human development is a process of enlarging people's choices that the most important standard of living. Additional choices include political freedom, guaranteed human rights and self-respect (UNDP HDR, 1990).

The concept of development is usually inherent in the context of the study of a change, development here is defined as a form of change that is planned; every person of group of people would expect changes that have a better and even better before; to realize this expectation certainly must require a plan. Planning development is more felt as more rational and orderly effort for the development of communities that have not or are just developing (Subandi, 2011).

The concept or definition of human development basically includes a very broad development dimension. In the concept of human development, development should be analyzed and understood from the human perspective, not just from its economic growth. As quoted from UNDP (Human Development Report, 1995), a number of important premises in human development are:

- Development must prioritize the population as the center of attention. Development is intended to increase choices for residents, not only to increase their income. Therefore, the concept of human development must

be centered on the population as a whole, and not just on economic aspects.

- Human development pays attention not only to effort to improve the capabilities (capabilities) of humans but also in effort to optimally utilize human capabilities.
- Human development is supported by four main pillars, that is: productivity, equity, harmony and empowerment.
- Human development is the basis for determining development goals and in analyzing choices to achieve them.

According to (UNDP, Human Development Report 1993: 105-106) the indicators chosen to measure the dimensions of HDI are as follows:

- Longevity, measured by the variable life expectancy at birth or life expectancy of birth and infant mortality rate per thousand population mortality rate.
- Educational Achievement, measured by two indicators, namely literacy of the population aged 15 years and over (adult literacy rate) and the average year of schooling for the population of 25 and above (the mean years of schooling).
- Access to resources, can be measured on a macro basis through GDP real per capita with the terminology of purchasing power parity in US dollars and can be supplemented by the level of the labor force.

According to (UNDP in the 1995 Human Development Report) which emphasizes that to expand human choices, the concept of human development must be built from four inseparable dimensions. Based on the above concept, to ensure the achievement of human development goals, there are from main elements that need to be considered (UNDP, 1995), that is:

a. Productivity People must be able to increase their productivity and participate fully in the process of seeking income and employment. Therefore, economic development is part of the human development model.
b. Equity Communities must have access to fair opportunities. All obstacles to economic and political opportunities must be eliminated so that the community can participate in and benefit from the opportunities.
c. Sustainability Access to the opportunity must be ensured that only for the present generation but also for generations. All types of capital, be it physical, human and environmental must equipped.
d. Empowerment Development must be carried out by the community, and not just for them. Communities must participate fully in making decisions and process that affects their lives.

2.2.2 Happiness as a measure of Development

Humans are creatures created with mind and heart. This makes people always strive to achieve happiness. Hurlock (1997) states that, happiness arises from meeting needs and expectations, and is a cause or means to enjoy.

Happiness can be achieved if needs and expectations can be achieved. Through fulfillment, individuals will get satisfaction as a sign of happiness. Satisfaction that is felt makes individuals enjoy their lives calmly and peacefully. Puspitorini (2012) states that happiness is a state of mind or feeling of pleasure and tranquility of life both physically and spiritually which is meaningful to improve self-function. Happiness makes individuals have 15 healthy personalities. A positive mood can make individuals more objective in addressing something, creative, tolerant, not defensive, generous and lateral or able to solve problems creatively (Seligman, 2005).

In the opinion of Seligman (2005), in his book entitled Authentic Happiness that real happiness that result of an assessment of self and life that contains positive emotions, such as comfort and overflowing joy, and positive activities that do not fulfill any emotional component such as absorb and involvement and he also said the meaning of the word "happy" is different from the word "happy". Philosophically the word "pleased" can be interpreted with perfect comfort and spiritual pleasure and a sense of satisfaction, and the absence of defects in the mind so that it feels calm and peaceful. Happiness is abstract and cannot be touched. Happiness is related to the psyche of the person concerned. Authentic happiness is derived from improving the quality of oneself, not from comparing yourself to others.

The Happiness Index is a multidimensional measurement using the GNH (Gross National Happiness Index) indicator that measures the level of happiness of society, in general happiness or happiness can be defined as the

degree of the individual assessing his quality of life as a favorably united or briefly defined as how far someone likes his life.

The Happiness Index, also known as the index of Happiness, is one of the indicators used to measure people's welfare based on the level of happiness of the community. The higher the index value shows the happier level of life, and vice versa, the lower the index value, the unhappier the population is. The happiness index is a composite index compiled by the level of satisfaction with 10 essential aspects in substance and together reflect the level of happiness which includes satisfaction with: 1) health, 2) education, 3) work, 4) household income, 5) family harmony, 6) leisure availability, 7) social relations, 8) housing condition and assets, 9) environmental conditions, and 10) security conditions.

The World Happiness Report is an annual publication of the United Nations Sustainable Development Solutions Network which ranks national happiness and analyzes data from various perspectives. The World Happiness Report was edited by John F. Helliwell, Richard Layard and Jeffrey Sachs. The 2017 edition adds three association editors; Jan-Emmanuel De Neve, Haifang Huang, and Shun Wang. The authors of these chapters include Richard Easterlin, Edward F. Diener, Martine Durand, Nicole fortin Jon Hall, Valerie Moller and many others.

In July 2011, the UN General Assembly adopted resolution 65/309. Happiness: Towards a Holistic Definition of Development invites member

countries to measure the happiness of their people and use data to help guide public policy. On April 2, 2012, this was followed by the first UN summit called Wellbeing and Happiness: Defining the New Economic Paradigm, chaired by UN Secretary General Ban Ki-moon and Prime Minister Jigme Thinley of Bhutan, a nation that adopted gross national happiness instead of gross domestic product as their main development indicator.

The first World Happiness Report was released on April 1, 2012 as the basic text for the UN Summit: Welfare and Happiness: Defining the New Economic Paradigm, attracting international attention. The report outlines the state of world happiness, the causes of happiness and misery, and the policy implications highlighted by the case study. In 2013, the second World Happiness Report was issued, and has since been published annually with the exception of 2014. This report mainly uses data from the Gallup World Poll. Each annual report is available to the public for download on the World Happiness Report website.

In the report, experts in fields including economics, psychology, survey analysis, and national statistics, explain how welfare measurements can be used effectively to assess the progress of the nation, and other topics. Each report is compiled by chapters that delve deeper into issues related to happiness, including mental illness, objective benefits of happiness, importance of ethics, policy implications, and links to the Organization's approach to Economic Cooperation and Development (OECD) to measure welfare subjective and other international and national efforts.

The World Happiness Report was published in 2012, 2013, 2015, 2016 (updates), 2017 and 2018. In addition to the level of happiness and well-being of ranking countries, each report has contributed to the author and is most focused on the subject. Data used to rank countries in each report is taken from the Gallup World Poll, as well as other sources such as the World Values Survey, in several reports. The Gallup World Poll questionnaire measures areas in its core questions: business & economics, citizen involvement, communication & technology, diversity (social problems), education & family, emotions (well-being), environment & energy, food & shelter, government and politics, law & order (safety), (health), religion and ethics, transportation, and work.

Happiness has been the subject of empirical research in various disciplines in recent years, for an overview of research from various fields, (Blanchflower & Oswald, 2011). The term happiness as used for this paper implies a subjective (positive) assessment of the general quality of current life from an individual perspective (Helliwell and Barrington-Leigh 2010). The standard approach to measuring happiness in empirical surveys is to ask people to use an ordinal scale of four to ten points (Graham 2011). Usually, the question is introduced by sentences such as " If you think about your life in general 'or' 'If you take all things together' to make it clear that the goal is to measure subjective well-being that is more general, not short-term, specific. In our empirical survey, happiness has occurred measured on a 5-digit scale starting from ‘‘very happy’, ‘quite happy’, and ‘happy ’for ‘not too happy.

2.2.3 Happiness in an Islamic perspective

The teachings of Islam come by bringing peace and happiness to every creature of God that is present throughout. Islam is a teaching that teaches many concepts and efforts. Achievement of happiness for his people who not only swirls on worldly happiness, but also happiness ukhrowi (afterlife) and not only happiness is born but there is also inner happiness (Eddy, 2007).

According to Al-Ghazali (1058M-1111M), happiness is interpreted as a union between science, charity, spirituality, and body. The characteristics of happiness described by Al-Ghazali are located in all the sciences. The theory is classified as the science of knowing God, angels, books, apostles and creed because all have a place because all have the highest place, namely knowing Allah SWT. Al-Ghazali stated that the knowledge of knowing Allah SWT is the key to happiness, while the science of amali is knowledge that is applied in actions and actions in daily life such as social, law, politics, Sharia, economics and some of them. With this, happiness will be achieved if all the theories and amali are combined because the two sciences provide goodness and enjoyment to human life (Zahida, 2011).

Happiness is the result of happiness in the world that is immediately felt. But there is also happiness enjoyed in the hereafter, namely in heaven, whose enjoyment is never interrupted. There are also people who are successful in the world but are wretched or suffering in the hereafter and get a look at hell. This is as explained by the word of God in the Surah Hud verses 105-108:

Meaning:

105. When that day comes, no one speaks, except with His permission; then some of them are miserable and some are happy.

106. Then as for those who are miserable, then (the place) in hell, there they take out and breathe in whimpering,

107. they will abide there for as long as there is heaven and earth, unless your Lord wants (others). Indeed, your Lord is Executing What Lord wills.

108. And as for those who are blessed, then (the place) in heaven; they abide therein as long as there is heaven and earth, unless your Lord wills (others); as a gift that has no end.

The meaning of happiness in the world and in the hereafter described in the Qur'an is an explanation that gives meaning that how success becomes a pleasure, that is when a person obtains heaven (gets the pleasure of Allah) and when that success comes from peace of mind and justice between humans. Those who are happy are the servants of Allah SWT who have the best scales when the day of reckoning (yaum al-hisab) comes.

(QS. Al-A'raf:8)

Meaning:

8. The scales on that day are the measure of truth. So, whoever weighs the good, they are the lucky ones.

Those who are also happy people who have repented after sinning with true repentance, faith and always doing good deeds.

(QS. Al-Qasas: 67)

Meaning:

67. So as for those who repent and believe, and work on virtue, hopefully he is among the lucky ones.

As for the characteristics of people who are happy in the Mukhtaaral hadith the Prophet Muhammad said "happiest happiness is Longevity in obedience to Allah. (HR. Ad-Dailami and Al-Qodho'i) as well as in other hadiths, the Prophet also showed someone's happy traits. "Four cases are the happiness of someone, namely: having a pious wife, having children and looking for rizki in their own country (HR. Dailami from Ali Ra)

Some index has been developed as variations or possible alternatives for HDI more commonly used to measure human welfare in the development process, such as the Quality of Life Index, Happiness Index and so on, very few are trying to integrate religious aspects of development that reflect spiritual well-being that has been important component in development. The components are in the view of Islam which is the goal to achieve the measurement of Happiness Index, human development and human welfare in other words have important meanings in the concept of Islamic development.

2.2.4 Maqhasid Shariah

Referring to Al-Ghazali's perspective that *maqâshid syari'ah* is the goal of sharia to seek the welfare of all humanity, with the main task of maintaining faith, the soul of mankind, their intelligence, their descendants and their wealth. Human development in an Islamic perspective can be based on the maqâshid syari'ah. Thus it is appropriate that *maqâshid syari'ah* can be

used as the main reference in the pace of development steps carried out mainly for Islamic countries or countries with a majority Muslim population. The measures and development approaches recommended by conventional development theories to date have not been able to measure development appropriately. The limitations of the Human Development Index (HDI) and the Happiness Index in capturing all development phenomena have resulted in the approach being non-comprehensive and always misguided. The phenomenon that human needs are broader than what is measured in health, education and income as a composite indicator of HDI and the Happiness Index causes new measures to emerge that seek to bring development performance closer to what is really. Muslim scientists through the *maqshid syari'ah* approach, tried to form a new measure in measuring the performance of the development.

The *Maqashid Syari'ah* language consists of two words, *Maqashid* and *Syari'ah*. Maqashid means intentional or purpose, *Maqashid* is a form of jama 'from maqsud which comes from the syllable Qashada which means to want or mean, *Maqashid* means things that are desired and intended. Whereas *Syari'ah* in language means الماء الي تحدر المواضع meaning the road to the source of water, the road to the source of water can also be interpreted walking towards the source of life

In the Al-Qur'an Allah SWT mentions a number of Shari'ah words including those in Surat al-Jassiyah and al-Shura:

Meaning: then We make you above a Shari'a (rule) from the business (religion), Then follow the Shari'a and do not follow the passions of those who do not know. (Q: S, 45:18)

Meaning: He has told you about the religion that He has given to Noah and what We have revealed to you and what We have testified to Abraham, Moses and Jesus That is: Establish the religion and do not divide about it.

(Q: S, 42: 13)

Maqashid sharia is the objectives of the Shari'a and the secrets intended by Allah in every law of the legal order. The essence of the goal of sharia is to realize the benefit of humanity and eliminate kemudorotan, while mabadi (basic principle), namely paying attention to the basic values of Islam. Like equality, equality and independence.

In his thinking Imam Al-Ghazali divided the maslahat into five, namely

1. Maintain religion (*hifdz ad-Din*); illat (reason) is obliged to fight and see if it is shown to enemies or similar goals.
2. Guarding the soul (*hifdz an-Nafs*); illat (reason) is required by the qishaash law, among others by maintaining its glory and freedom
3. Maintain reason (*hifdz al-aql*); illat (reason) is forbidden from all intoxicating objects or narcotics and the like.
4. Maintain property (*hifdz al-Mal*); illat (reason); cutting off hands for thieves, illat is forbidden from usury and bribes bribe, or eat other people's assets in other ways.

5. Guarding offspring (*hifdz an-Nasl*); illat (reason); prohibited zina and accusing people of adultery.

2.2.5 Religion (Ad-Din)

Various studies in America have found that there is a significant correlation between happiness and one's belief in religion, the strength of one's relationship with God, worship, and participation in religious activities (Eddington & Shuman, 2005). This can occur because religious experience or beliefs that someone has makes a person have a meaningful feeling in his life (Eddington & Shuman, 2005). Religion is also capable of meeting one's social needs through religious activities carried out jointly or because they share the same values and beliefs. For example, the activities held by a church can make the church members establish friendships with other members or by adhering to a particular religion can make a person feel that he is part of a group of people who hold the same values and beliefs.

There is a positive relationship between religiosity and happiness, that is, religious people are happier and more satisfied with their lives than individuals who are not religious (Putri Aulia, et al: 2012). Religious people will feel more to calm than those who are less religious. This is because with the existence of religion, individuals have a clear life grip, so it is not easy to get worse with the problems at hand.

According to Miskahuddin (2017) Religion is a human intellectual need and spiritual needs that are able to encourage people to continue to work hard in the world and reach victory in the hereafter with the outpouring of mercy

and the blessings of happiness that Allah bestowed on him, due to humans having successfully carried out religious activities in the world and get Rida Allah SWT with reward and heaven's reward from Allah SWT. Religion in accordance with its functions and roles can encourage people to be patient in facing all the challenges of life, both heavy and light, small and large and constantly guiding people towards true glory and high spirit of sacrifice in order to get Ridha Allah SWT. Because, with Rida Allah it is human beings who can be rewarded and blessed.

2.2.6 Life Expectancy (An-Nafs)

Research findings have shown that happiness levels tend to be stable throughout the lifespan (Eddington & Shuman, 2005). This is in line with the level of life satisfaction that is also stable over the lifespan. Even if there is a decrease in the level of happiness in the age range, this might be caused by a decrease in the ability to adapt to living conditions, such as declining income levels, and marriage. But researchers have proven that a person is able to adjust his goals as we age so that both happiness and life satisfaction levels tend to be stable (Eddington & Shuman, 2005).

Eddington & Shuman, (2005) found that there is a high correlation between happiness and health. But the health in question is a subjective assessment that he is a healthy person, not based on a health expert judgment. So, it can be said that people who claim to be healthy people are people who have a high tendency to happiness. Individuals who have poor health conditions or have chronic diseases will show a low level of happiness. But

this is also related to individual adaptability, if the individual has adaptability or good coping skills, then he can show a higher level of happiness (Eddington & Shuman, 2005).

Life Expectancy is the average estimated number of years a person can take during life. Calculation of life expectancy through an indirect approach (indirect estimation). The types of data used are Children Born Alive and Children Still Alive. The Mortpark program package is used to calculate life expectancies based on Children Born Alive and Children Still Alive data input. Hendrik L. Blum explained that the degree of public health is influenced by four main factors, namely environmental factors, behavior, health services and offspring. The four factors influence the health status of the people in an area so that indirectly it also affects the size of Life Expectancy (Notoatmodjo, 1997).

The other definition of Life Expectancy is one of the indicators used to assess the health status of the population, meaning that if life expectancy increases, the health status of the population also increases and extends the life expectancy. The phenomenon of an increase in life expectancy in Indonesia that occurs shows that the level of welfare of the Indonesian people is increasing.

2.2.7 Education (Al-Aql)

The level of education has a small but significant correlation with the

level of subjective well-being (SWB). This is obtained from research conducted in America. Eddington & Shuman (2005) have this assumption that can occur because of the influence of education that has weakened over time for American society. Education levels have a slightly greater correlation in individuals with low income and in people in poor countries (Eddington & Shuman, 2005). Education can be a little influential in increasing happiness in those with low income because education is a means to achieve better income.

According to Brown (2004) that education is a conscious process of control where changes in behavior are generated within that person through within the group. From this view education is a process that starts at birth and lasts throughout life. Ahmadi & Uhbiyati (2007) argued that education is essentially a conscious and intentional activity, and full of responsibility carried out by adults to children so that interactions arise between them so that children reach maturity that is reported and continues.

2.2.8 Family (An-Nasl)

Married individuals tend to be happier than those who are not married. Happier married individuals can be caused by marriage providing psychological and physical intimacy, the context for having children, building a household, and affirming social identity and roles as partners and parents (Alan Carr, 2004). Marriage has a significant relationship with SWB especially in American, Canadian and Norwegian countries (Eddington & Shuman, 2005). In Eddington & Shuman, (2005) found that married people are happier than people who are not married, divorced, separated, or become

widows or widowers. Couples who do cohabitation without marriage also have significantly higher levels of happiness compared to people who live alone (Eddington & Shuman, 2005). Research still shows the results that marriage and well-being correlate significantly even though age and income levels have been controlled.

Fertility is the natural ability to give offspring. As a measure, fertility is the number of children born per partner, person, or population. Fertility is real, not potential, so it is different from fecundity, which is defined as the potential to reproduce. Fertility as a demographic term as a result of a real reproduction of a woman or group of women. In other words, this fertility concerns the number of babies born (FE UI, 1981). From this understanding, birth is the number of babies born to women. There is a baby called live birth, namely the birth of a baby who shows signs of life, it is not estimated how long the baby shows signs of life. Signs of life include breathing, heartbeat and others. There are also stillbirths which mean babies without showing signs of life (Sinuraya, 1990).

Fertility is a term used in the field of demography to describe the number of children who are truly born alive (Pollard & Yusuf, F. 1989). Besides the term fertility there is also the term fecundity (fecundity) as a guide to the physiological and biological abilities of a woman to produce a child born alive (Mantra, I.B., 2006). *Demografi Umum. Edisi 2. Penerbit Pustaka Pelajar*: Yogyakarta. Fertility is usually measured as the frequency of birth that occurs within a certain population. On the one hand it may be more

natural if fertility is seen as the number of births per person or per couple, during the fertility period (Barcla, 1984).

2.2.9 GDP per capita (Al-Mal)

In addition to personal income, national income is considered. Eddington & Shuman, (2005) found that the level of Gross National Product (GNP) has a correlation of around 50 with life satisfaction and happiness. In addition, Gundlach & Kreiner, (2004) added that their research found a correlation between Gross Domestic Product (GDP) and happiness levels in several countries that have different poverty levels. Gelati et al., (2006) found that there was a strong relationship between the level of welfare of a country and the level of happiness. The more prosperous a country is, the higher the level of happiness and satisfaction of its people.

Eddington & Shuman, (2005) has found that there is only a small but significant correlation between the level of income of a person and the level of nationality or SWB. In general, wealthier people have a higher happiness level of 19 compared to poorer people, but the difference is very small (Diener et al., 2005). According to McEachern, (2000) states that: "Gross domestic product / GDP means measuring the market value of the final goods and services produced by resources that are in a country for a certain period, usually one year. GDP can also be used to study the economy from time to time or to compare several economies at a time. "

Definition of Gross Domestic Product according to Sukirno (2004), namely: "National income describes the level of state production achieved in a

given year and changes from year to year. So, it has an important role in describing (i) the level of economic activity achieved, and (ii) changes in its growth from year to year. National product or national income is a term that applies to the value of goods and services produced by a country in a given year. "According to Arifin & Hadi (2009)" The indicator used to determine the economic growth of a country is the level of Domestic Production Gross (GDP)".

2.2.10 Population

According to Oliver (2003), a small area with a small population density and the level of diversity of small populations are believed to have a high level of happiness. The smaller the population in a region, the higher the level of self-efficacy and sense of control. Relations between one citizen and other residents or between neighbors are also more interwoven than over too large areas and too many people (Oliver, 2003). Oliver (2003) also added that the more densely the population in a region, the more depressed, unhappy, and dissatisfied with life in their environment.

According to Arikunto (2013) the population is the whole of the research subjects. So, what is meant by population are individuals who have the same nature even though the percentage of similarity is small, or in other words all individuals who will be used as the object of research. While Sugiyono (2013) population is a generalization consisting of objects/subjects that have certain qualities and characteristics set by researchers to be studied and then conclusions drawn.

2.3 Framework for Thinking

The framework of this research can be explained through the following picture.

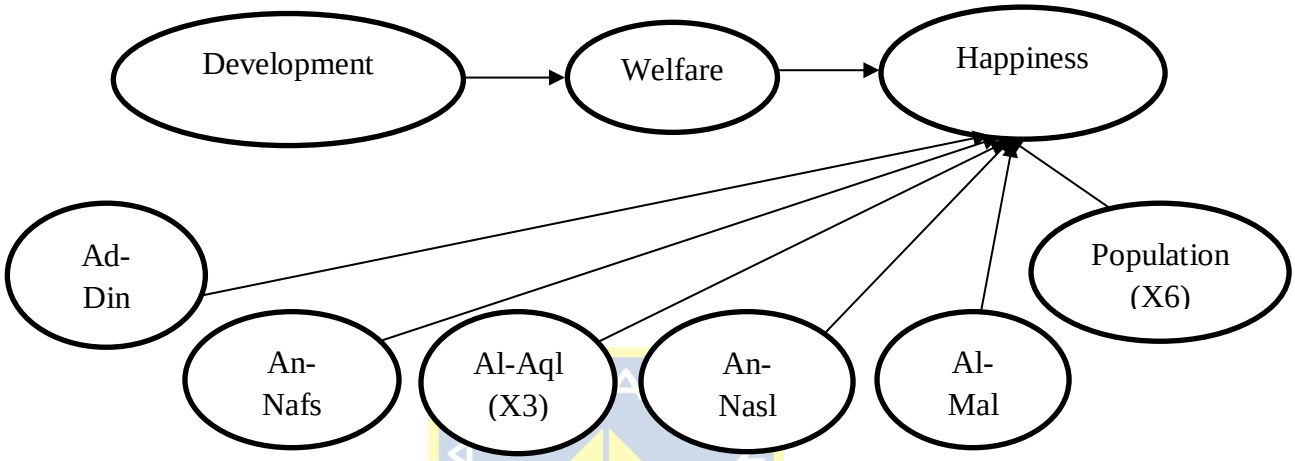


Figure 2.1 Framework of the research

2.4 Hypothesis

Based on relevant theories and concepts, as well as previous research results on factors influencing the flow of Happiness. Then it can be given a temporary answer to the existing problems. The hypothesis in this research are:

1. Religion (Ad-Din) has influence on Happiness in The World
2. Life Expectancy (An-Nafs) has effect on Happiness in The World
3. Education (Al-Aql) has influence on Happiness in The World
4. Family (Al-Nasl) has influence on Happiness in The World
5. GDP per capita (Al-Mal) has effect on Happiness in The World
6. Population has influence on Happiness in The World

CHAPTER III

RESEARCH METHOD

3.1 Type of Study

The type of study which was conducted by the researcher is quantitative research. This research uses quantitative methods by generating numerical data or data that can be transformed into useable statistics. The type of data in this research is secondary data. The researcher reuses information as it is accessible and more efficient to collect. Secondary data is data from books, literature, reading scientific journals, which have relevance to the theme of research. In this research, the secondary data was obtained through the data from World Bank, website (https://data.worldbank.org).

3.2 Data Collection Method

Method of collecting data that used in this research is the study of the literature. It is an attempt to obtain data by studying and analyzing the literature books and processed data. The collections of data in this study are intended to obtain materials that are relevant and accurate. The data used are secondary data by using a data collection method in studies of original documents from the World Bank Data as well as other library resources related with the research.

3.3 Research Variable

This research contains of independent variable and dependent variable. Dependent variable in this research is Happiness Index of the World that

consist of 155 countries. However, because of uncompleted data of realization in some countries taken in the world bank, then it just took the data of the countries which have the data and the fix total is 141 countries, so the independent variables are religion, life expectancy, education, family, GDP per capita, and population can be defined as follows:

3.3.1 Dependent Variable

Dependent variable is a variable which is influenced by independent variables. This study used Happiness as a dependent variable. Happiness is measured by Happiness Index according to the World Happiness Report years.

3.3.2 Independent Variable

The independent variable is variable that affect dependent variables. Independent variables used in this study are:

A. Religion / *Ad-Din* (X1)

Religion as the first variable in research and as this basis measures happiness, because there is a significant correlation between happiness and one's belief in religion, there is a positive relationship between religiosity and happiness, that is, religious people are happier and more satisfied with their lives than individuals who are not religious. In this study there is a Dummy variable to measure 1 as a Muslim country and 0 as a non-Muslim country. The classsification of muslim country is based on the membership of OIC (Organization of Islmic Country).

B. Life Expectancy / *An-Nafs* (X2)

Life expectancy is the second variable that correlates with the level of life satisfaction and age, so that both happiness and life satisfaction levels have a high correlation between happiness and health. The Life expectancy classification data based on World Bank Open Data.

C. Education / *Al-Aql* (X3)

Education is processed from School enrollment, primary and secondary (gross), gender parity index (GPI) data from World Bank by 142 countries 2014-2016. Education can be a little influential in increasing happiness in those with low income because education is a mean to achieve better income and income as a measure of one's well-being in achieving happiness and the data classification based on World Bank Open Data.

D. Family / *An-Nasl* (X4)

The family as the fourth variable defined married individuals who tended to be happier than those who were not married. Happier married individuals can be caused by marriage providing psychological and physical intimacy, the context for having children, building a household, and affirming their identity and social role as partners and parents moreover Married people are happier than people who are not married, divorced split, or become a widow or widower. This Family indicator is constructed by using the indicator adolescent fertility rate divide with mortality rate and than the result is measured by the formula $x_4 = \frac{FR}{MR}$ and the data classification based on World Bank Opem Data.

E. Gross Domestic Product per capita / *Al-Mal* (X5)

Gross Domestic Product Per capita (GDP) is defined as welfare with a level of happiness that has a significant correlation. GDP Per capita is the amount of income of the average population in a country. GDP per capita is derived from the result of the division of a country's national income with the population of that country. Per capita income also reflects GDP per capita. In countries that have different levels of poverty and increased income. They have higher level of happiness and satisfaction of their lives based on their welfare. The data classification based on World Bank Open Data.

F. Population (X6)

The usual population is defined as a small area with a small population density. The level of diversity of small populations is believed to have a high level of happiness and usually also adds that the more densely populated in a region, the more depressed, unhappy, and dissatisfied with life in their environment. The data classification based on World Bank Open Data.

3.4 Analysis Technique

The processing of secondary data that have been collected from various sources is using some statistical program packages, such as Microsoft Excel 2013 and EViews 9.0. In processing data activities, the researcher used Microsoft Excel 2013 to create tables and to analyze the data. Meanwhile, in

the processing of regression data panel, the researcher used program package Eviews 9.0.

3.4.1 Cross Section Regression Analysis

Cross section regression analysis was used to find out how the influence of independent variables, namely Happiness on the dependent variables, namely Religion (*Ad-Din*), Life Expectancy (*An-Nafs*), Education (*An-Aql*), Family (*An-Nafs*), GDP per capita (*Al-Mal*) and Population. As for the regression model in this study are as follows:

$$Y=a+b1X1+b2X2+b3X3+b4X4+b5X5+b6x6$$

With:

Y = Happiness

a = constant

b = regression coefficient

X1 = Religion

X2 = Life Expectancy

X3 = Education

X4 = Family

X5 = GDP per capita

X6 = Population.

3.4.2 Classic Assumption Test

The classic assumption test aims to determine the feasibility of using a regression model in this study. Classic assumption test consists of multicollinearity test, autocorrelation test, heteroscedasticity test, and

normality test data (Ghozali, 2011). In this study, the classic assumption test used was the multicollinearity test, heteroscedasticity test, and normality test data. The autocorrelation test aims to test whether in the linear regression model there is a correlation between interfering errors in period t with interfering errors in period t-1 (previously) (Ghozali, 2011).

A. **Normality test**

This normality test aims to test whether in the regression model, the disturbing or residual variables have a normal distribution. There are two ways to detect whether the residual has a normal distribution or not, that is by using graph analysis and statistical tests (Ghozali, 2011). In this study, the normality test was detected using statistical analysis of non-parametric Kolmogorov-Smirnov Z (1-Sample K-S).

The way to find out whether the data were normally distributed or not is by using a distribution on the P-P chart plot with the basis of decision that if the data spreads around the diagonal line and follows the diagonal line direction or the histogram graph shows a normal distribution pattern, the regression model meets the assumption of normality. In addition, the normality test can also be tested by Kolmogorov Smirnov (K-S) non-parametric statistics using a significance level of 5%. If, the significance of the Kolmogorov Smirnov value is> 5%, the data used are normally distributed (Ghozali, 2011).

B. Multicollinearity Test

Multicollinearity test aims to test whether there is a correlation between independent variables. A good regression model should not have a correlation between independent variables. If the independent variable correlates with each other, then these variables are not orthogonal. Orthogonal variables are independent variables whose correlation value between independent variables is zero (Ghozali, 2011). Multicollinearity in the regression model can be seen by analyzing tolerance value and VIF (Variance Inflation Factor). If the tolerance value is> 0.10 and VIF <10, there is no multicollinearity.

C. Autocorrelation Test

Autocorrelation test is a correlation between disturbance variables of one observation with other observation disturbance variables. Testing for autocorrelation can be done using the Durbin-Watson Test. This test produces the calculated DW value (d) and the DW value of the table (dL and du). The size of decision making is as follows:

1) Positive autocorrelation occurs, if the DW value is below -2 (DW <-2)

2) There is no autocorrelation, if the DW value is between -2 and +2 or -2 ≤ DW 2 +2.

3) Negative autocorrelation occurs, if the DW value is above +2 or DW more than +2.

D. Heteroscedasticity Test

The purpose of this test is to test whether in the regression model, variances occur from residual inequalities, one observation to another

observation. If the residual variant of an observation to another observation remains, it is called homoscedasticity and if it is different, it is called heteroscedasticity. A good regression model is homoscedasticity (Ghozali, 2011). In this study a way to detect the presence or absence of heteroscedasticity is by using statistical tests. The statistical test that will be used to detect the presence or absence of heteroscedasticity in the regression model is the Glejser test. Test Glejser proposes to regress the absolute value of residuals on independent variables (Gujarati, 2003 in Ghozali, 2011). The regression equation from the Glejser test is as follows:

$$|Ut| = \alpha + \beta Xt + vt$$

E. Hypothesis Test

Hypothesis testing is a decision-making method based on data analysis, both from controlled trials and uncontrolled experiments. This test was conducted to find out the relationship between the independent variables, namely good corporate governance, KAP and leverage measures with the dependent variable namely earnings management using the t test (Partial Test), F Test (Simultaneous Test, T Test (Partial Test), Determination Coefficient (R^2).

a. Variance Analysis / F-Statistic Test

The F-statistic test is to test the effect of independent variables on overall non-independent variables (simultaneous). Testing by

comparing the specified α value (0.05) or 5% The F-statistic test is usually in the form of:

a. Ho is accepted and Ha is rejected, if it is significant so F> 0.05 or F-count <F table

b. Ho is rejected and Ha is accepted, if it is significant so F <0.005 or F-count> F table

b. T- Statistic Test

The t-statistic test was used to test the effect of partial variables on partially independent variables. The t-statistic test is usually a hypothesis test:

a. Ho is accepted and Ha is rejected, if it is significant so t> 0.005 or t-count <t-table

b. Ho is rejected and Ha is accepted, if it is significant so t <0.005 or t-count> t-table

Determine the receiving area using the t test. Critical points were taken from the distribution table t with an error rate or significance level (α) of 0.05 and degrees of freedom (df) = n-1-k, where n = number of samples, k = number of independent variables.

c. Coefficient of Determination (R^2)

The coefficient of determination (R^2), is was to measure how much free variables can explain the dependent variable. This coefficient shows how much the total variation in the dependent variable can be

explained by the independent variable in the regression model. The value of the coefficient of determination is between 0 and 1.

The value (R^2) that approaches 1 shows that the variables in the model can represent the problem being studied, because it can explain the variations that occur in the dependent variable. The value (R^2) is equal to or close to 0 (zero) indicating the variables in the formed model cannot explain variations in the dependent variable. The coefficient of determination will tend to be greater if the number of independent variables and the amount of data observed is increasing. Therefore, the adjusted size (R2) is used, to eliminate bias due to the addition of the number of independent variables and the amount of data observed

Determination Coefficient (R2) = R - Squared x 100%

CHAPTER IV

RESULT AND DISCUSSION

The following explanation discusses the results of the study containing the analysis and discussion of this study. The data used in this study is secondary data. In this chapter consist of 2 models, namely model I with 141 data and model II with 79 data.

Model I is data without care that has 141 countries. In model I, researchers include all data on the variables under study, from existing data and add on with assumption data. So, it was taken from a year other than that.

Model II is data with treatment that has 79 countries. In model 2 the researcher includes existing data and discards non-existent data or outlayer such as extreme / deviant data which makes the hypothesis test amount to 79 data.

In accordance with the problems and formulation of the model that has been stated, and the importance of testing the hypothesis, the analytical techniques used in this study include Cross Section Analysis using Eviews 9.

4.1 Descriptive Statistics

The data collected in the study were processed and analyzed using statistical tools, namely descriptive statistics. Descriptive statistical analysis was used to describe the variables contained in the study. Descriptive statistical testing aims to provide an overview of the variables to be examined. Processing descriptive statistics shows the size of the sample under study, mean (standard), standard deviation, maximum, and minimum of each variable.

The mean is the sum of the values of all data divided by the amount of data. Standard Deviation is the root of the sum of squares of the difference in the value of data with the average divided by the amount of data. The standard deviation measures the extent of the deviation or spread of the data value from the mean mean value. If the standard deviation of a variable is high, then the data in that variable spreads more from the mean value. Likewise, vice versa, if the standard deviation of a variable gets lower, then the data in the variable collects more at its mean value. The maximum is the largest value of a series of observations. Minimum is the smallest value of a series of observations.

The results of processing descriptive statistics model I with a sample of 141 can be seen in table 4.1:

Table 4.1

Descriptive Statistics Model I

	Religion	Life Expectancy	Education	Family	GDP per capita	Population
Mean	0.297872	72.25987	0.975248	2.683810	13551.44	51824814
Median	0.000000	74.39500	0.996000	1.818000	4878.570	11917508
Maximum	1.000000	83.98500	1.098000	53.01700	100738.7	1.38E+09
Minimum	0.000000	51.83500	0.621000	0.000210	122.1900	335439.0
Std. Dev.	0.458953	8.030868	0.084424	5.009523	18984.33	1.65E+08
Skewness	0.883960	-0.702312	-2.114693	8.229209	2.009404	7.094238
Kurtosis	1.781385	2.699848	7.902301	78.17326	6.914130	55.84708
Jarque-Bera	27.08706	12.12049	246.2815	34791.15	184.8935	17590.49
Probability	0.000001	0.002334	0.000000	0.000000	0.000000	0.000000
Sum	42.00000	10188.64	137.5100	378.4172	1910753.	7.31E+09
Sum Sq. Dev.	29.48936	9029.277	0.997828	3513.345	5.05E+10	3.80E+18
Observations	141	141	141	141	141	141

Source: EViews 9

Based on the table above, it shows that the total sample used is 141 countries. The religious variable shows an average value of 0.298 with a standard deviation value of 0.459. Life expectancy variables show an average value of 72.259 with a standard deviation value of 8.031. Educational variables show an average value of 0.975 with a standard deviation value of 0.084. The birth rate variable shows an average value of 2.684 with a standard deviation value of 5.009. The GDP per capita variable shows an average value of 13551.44 with a standard deviation value of 18984.33. Population variables show an average value of 51824814.

Table 4.2

Descriptive Statistic Model II

	Religion	Life Expectancy	Education	Family	GDP Per capita	Population
Mean	0.278481	4.286613	-1.973159	0.204454	6.12E+11	62439772
Median	0.000000	4.311403	-2.421390	0.617906	5.32E+10	10524117
Maximum	1.000000	4.417606	0.000000	1.724937	1.86E+13	1.38E+09
Minimum	0.000000	3.948066	-7.402366	-29.14589	3.882497	335439.0
Std. Dev.	0.451116	0.116143	2.110295	3.435546	2.43E+12	2.16E+08
Skewness	0.988369	-1.266873	-0.434804	-8.140848	6.330838	5.492103
Kurtosis	1.976874	4.155645	1.896982	70.08434	44.00155	32.86704
Jarque-Bera	16.30785	25.52813	6.494018	15487.56	6061.424	3333.446
Probability	0.000288	0.000003	0.038890	0.000000	0.000000	0.000000
Sum	22.00000	338.6424	-155.8795	15.94745	4.84E+13	4.93E+09
Sum Sq. Dev.	15.87342	1.052162	347.3609	908.8291	4.60E+26	3.65E+18
Observations	79	79	79	79	79	79

Source: EViews 9

Based on the table above, it shows that the overall sample used was 79 countries, while the family used a sample of 78 countries. The religious variable shows an average value of 0.278 with a standard deviation value of

0.451. Life expectancy variables show an average value of 4.287 with a standard deviation value of 0.116. Educational variables show an average value of -1.973 with a standard deviation value of 2.11. Family variables show an average value of 0.204 with a standard deviation value of 3.436. The GDP variable shows an average value of 612 billion. The population variable shows an average value of 62439772.

4.2 Model Testing I

In testing model I, it consists of 141 data that were tested by testing classical assumptions, cross section regression analysis, coefficient of determination and hypothesis testing.

4.2.1 Submission of Classical Assumptions Model I

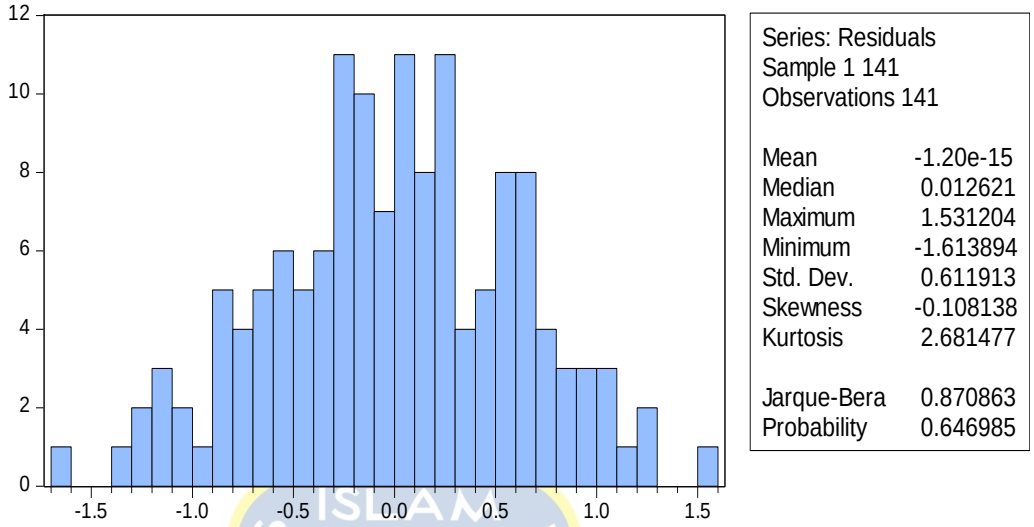
Before testing hypotheses using cross section regression analysis, there are several assumptions that must be fulfilled so that the conclusions of the regression are not biased, including the normality test, multicollinearity test (for cross section regression), and heteroscedasticity test.

4.2.1.1 Model I Test Normality

Normality test is a very important requirement in testing the significance (significance) of the regression coefficient. To test the normality of the data, the study uses the Histogram-Normality Test, which is presented in the following figure:

Figure 4.1

Model I Test Normality



Source: EViews 9

To detect whether the residual is normally distributed or not it is done by comparing the probability value of Jarque-Bera (JB) with $\alpha = 0.05$, which is with the following provisions:

a. If the JB value is > α, then the residual is normally distributed.

b. If the value of JB is < α, then the residue is not normally distributed.

Based on the figure above, to detect whether the residuals were normally distributed or not it is done by comparing the value of Jarque-Bera (JB) with $\alpha = 0.05$. The output analysis shows that the JB value is 0.647 with $\alpha = 0.05$, because 0.647> 0.05, it can be concluded that the residual is normally distributed.

4.2.1.2 Multicollinearity Test Model I

Multicollinearity is a significant linear relationship between several or all independent variables in the regression model. If there is

Multicollinearity, the regression coefficient becomes uncertain, the error rate becomes very large and is usually characterized by a very large coefficient of determination but in partial testing of the regression coefficient, none or if there is very little significant regression coefficient.

Table 4.3

Multicollinearity Test Model I

Variance Inflation Factors
Date: 09/15/18 Time: 12:13
Sample: 1 141
Included observations: 141

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.500589	180.4254	NA
Religion	0.014914	1.601215	1.124257
Life Expectancy	9.84E-05	187.5460	2.272236
Education	0.568286	196.2606	1.449506
Family	0.000115	1.327806	1.030051
GDP Percapita	1.30E-11	2.530411	1.672245
Population	1.07E-19	1.140800	1.037499

Source: EViews 9

If the VIF value is <10, there is no multicollinearity. So, based on the value of VIF (Variance Inflation Factor) it can be concluded that the regression model does not contain multicollinearity, so that further testing can be continued because it has fulfilled the requirement for classical assumption that there is no multicollinearity.

4.2.1.3 Model I Heteroscedasticity Test

Heteroscedasticity is a condition where the variance of each disturbance is not constant. Heteroscedasticity tests can be done by using White Heteroskedasticity available in the Eviews 9 programs. The results to consider from this test are the probability Chi-square Obs*R-Squared values. If the probability Chi-square Obs R-Squared value is greater than the value α then there is no heteroscedasticity or vice versa.

To detect the problem of heteroscedasticity, it can be seen in the residual estimation results. If the residual moves constant it means there is no heteroscedasticity and if it forms a certain pattern it indicates the existence of heteroscedasticity. The way to test heteroscedasticity using White Heteroscedasticity is presented in the following table:

Table 4.4

Model I Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.931913	Prob. F(6,134)	0.4743
Obs*R-squared	5.647896	Prob. Chi-Square(6)	0.4638
Scaled explained SS	4.288635	Prob. Chi-Square(6)	0.6377

Source: EViews 9

Models passed the heteroscedasticity test with provisions, namely:

a. If the probability Chi-square Obs * R-Squared < α, then the model does not pass the heteroscedasticity test.

b. If Obs * R-Squared > α Chi probability Chi-square value, then the model passes the heteroscedasticity test

Based on the table above, the probability Chi-square Obs * R-Squared value for the white heteroskedasticity test results is 0.4638. While the value of α with α = 0.05. Because the probability Chi-square Obs * R-Squared> α value, it can be concluded that the model passes the heteroscedasticity test.

4.2.2 Analysis of Cross Section Regression Model I

The formulation of cross section regression equation is as follows:

ˆ Y = a + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + b6X6

With:

ˆ Y = Happiness index value

a = Constants

bi = Regression coefficient

X1 = Religion

X2 = Life Expectancy

X3 = Education

X4 = Family

X5 = Gross Domestic Product (GDP) per capita

X6 = Population

By using Eviews software, the results of cross section regression analysis are described as follows:

Table 4.5

The Coefficient of Cross Section Regression Model I

Dependent Variable: Y
Method: Least Squares
Date: 09/15/18 Time: 12:10
Sample: 1 141
Included observations: 141

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.578153	0.707523	-2.230533	0.0274
Religion	-0.232231	0.122124	-1.901595	0.0594
Life Expectancy	0.073305	0.009922	7.388096	0.0000
Education	1.517257	0.753847	2.012685	0.0462
Family	-0.006667	0.010710	-0.622544	0.5346
GDP per capita	2.11E-05	3.60E-06	5.857536	0.0000
Population	-2.51E-10	3.27E-10	-0.768532	0.4435

R-squared	0.722793	Mean dependent var	5.384305
Adjusted R-squared	0.710381	S.D. dependent var	1.162218
S.E. of regression	0.625463	Akaike info criterion	1.947720
Sum squared resid	52.42125	Schwarz criterion	2.094112
Log likelihood	-130.3143	Hannan-Quinn criter.	2.007209
F-statistic	58.23221	Durbin-Watson stat	1.183807
Prob(F-statistic)	0.000000		

Based on the output above, a value of -1.578 is obtained, b1 value is -0.232; b2 value of 0.073; b3 value of 1.517; b4 value of -0.007; b5 value of 0,000; b6 value of -0,000. Thus the cross section regression equation can be formed as follows:

The value of a and bi in the above equation it can be interpreted as follows:

a = -1,578 means: X1, X2, X3, X4, X5 and X6 are worth 0, the happiness index will be -1,578.

b1 = -0.232 means: if religion increases by 1 while the other variables are constant, the happiness index will decrease by 0.232.

b2 = 0.073 means: if the life expectancy increases by 1 while the other variables are constant, the happiness index will increase by 0.073.

b3 = 1.517 means: if education increases by 1 while the other variables are constant, the happiness index will increase by 1.517.

b4 = -0.007 means: if the birth rate increases by 1 while the other variables are constant, the happiness index will decrease by 0.007.

b5 = 0,000 means: if GDP increases by 1 while the other variables are constant, the happiness index will increase by 0,000.

b6 = -0,000 means: if the population increases by 1 while the other variables are constant, the happiness index will decrease by 0,000.

4.2.3 Model I Coefficient of Determination Analysis

The coefficient of determination is used to find out how much the influence of the independent variables simultaneously explains the dependent variable. By using Eviews 9, the coefficient of determination can be seen in the following output table:

Table 4.6

Coefficient of Determination

R-squared	0.722793	Mean dependent var	5.384305
Adjusted R-squared	0.710381	S.D. dependent var	1.162218
S.E. of regression	0.625463	Akaike info criterion	1.947720
Sum squared resid	52.42125	Schwarz criterion	2.094112
Log likelihood	-130.3143	Hannan-Quinn criter.	2.007209
F-statistic	58.23221	Durbin-Watson stat	1.183807
Prob(F-statistic)	0.000000		

Source: EViews 9

From the table of output Eviews above, it is known that the coefficient of determination or R square is 0.71 or 71%. This shows that religion, life expectancy, education, family, GDP per capita and population simultaneously give effect to the happiness index variable of 71%. While the remaining 29% is the influence of other variables not examined outside of the religion, life expectancy, education, family, GDP and population per capita.

4.2.4 Model I Hypothesis Test

From the table above the hypothesis can be tested as follows:

1. The influence of religion on the index of happiness

   H0: b1 = 0 There is no religious influence on the happiness index

   H1: b1 ≠ 0 there is a religious influence on the happiness index

   Based on the results of the calculations shown in the table above, the p-value obtained from the t-test results from the religious variable of 0.059. Because the p-value is greater than the significant level α = 5% or (0.059> 0.05), then H1 is rejected; which means there is no religious influence on the index of happiness.

2. Effect of life expectancy on happiness index

   H0: b2 = 0 There is no effect of life expectancy on the index of happiness H2: b2 ≠ 0 there is an influence of life expectancy on the index of happiness

   Based on the results of the calculations shown in the table above, the p-value obtained from the t-test results from the life expectancy variable of 0,000. Because the p-value is smaller than the significant

level α = 5% or (0,000 <0.05), H2 is accepted; which means there is an influence of life expectancy on the index of happiness.

3. The effect of Education on the index of happiness

H0: b3 = 0 There is no educational effect on the happiness index

H3: b3 ≠ 0 there is an educational influence on the happiness index

Based on the results of the calculations shown in the table above, the p-value was obtained from the t-test results from the education variable of 0.046. Because the p-value is smaller than the significant level α = 5% or (0.046 <0.05), then H3 is accepted; which means there is an influence of education on the index of happiness.

4. Effect of Family on happiness index

H0: b4 = 0 There is no effect of the birth rate on the index of happiness

H4: b4 ≠ 0 there is an influence on the birth rate on the index of happiness

Based on the results of the calculations shown in the table above, the p-value was obtained from the t-test results from the birth rate variable of 0.535. Because the p-value is greater than the significant level α = 5% or (0.535> 0.05), then H4 is rejected; which means there is no effect on birth rates on the happiness index.

5. Effect of GDP on the index of happiness

H0: b5 = 0 There is no effect of GDP on the index of happiness

H5: b5 ≠ 0 there is an influence of GDP on the index of happiness

Based on the calculation results shown in the table above, the p-value was obtained from the t-test results from the variable GDP of 0,000. Because the p-value is smaller than the significant level α = 5% or (0,000 <0.05), then H5 is accepted; which means there is an influence of GDP on the index of happiness.

6. The effect of the population on the index of happiness

H0: b6 = 0 There is no population influence on the happiness index

H6: b6 $\neq$ 0 there is a population influence on the happiness index

Based on the results of the calculations shown in the table above, the p-value was obtained from the t-test results from the population variable of 0.444. Because the p-value is greater than the significant level α = 5% or (0.444> 0.05), then H4 is rejected; which means there is no influence of the population on the index of happiness.

4.3 Testing Model II

In testing model II consists of 79 data that were tested by testing classical assumptions, linear regression analysis, the coefficient of determination and hypothesis testing.

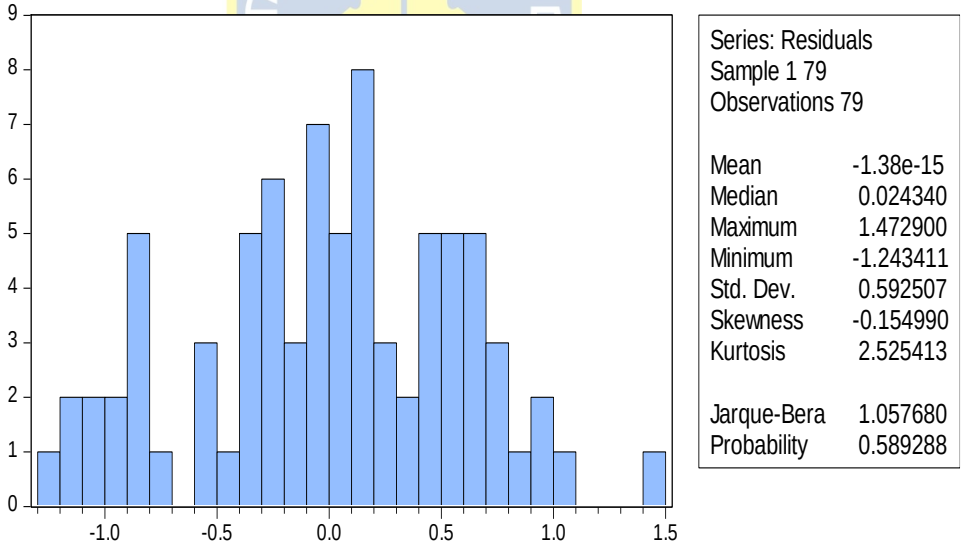
4.3.1 Classical Assumption Testing Model II

Before testing hypotheses using multiple linear regression analysis, there are several assumptions that must be fulfilled so that the conclusions of the regression are not biased, including the normality test, multicollinearity test (for multiple linear regression), and heteroscedasticity test.

4.3.1.1 Model II Normality Test

Normality test is a very important requirement in testing the significance of the regression coefficient. Histogram-Normality Test was used to test the normality of the data which is presented in the following figure:

Figure 4.2
Model II Normality Test



Source: EViews 9

To detect whether the residual is normally distributed or not the comparison of the Jarque-Bera (JB) with was used to detect $\alpha = 0.05$, which is with the following provisions:

a. If the JB value is > α, then the residual is normally distributed.

b. If the value of JB is < α, then the residue is not normally distributed.

Based on the figure 4.2, to detect whether the residual is normally distributed or not the comparison of the Jarque-Bera (JB) with was used to detect $\alpha = 0.05$, because $0.589 > 0.05$, it can be concluded that the residual is normally distributed.

4.3.1.2 Model II Multicollinearity Test

Multicollinearity is a significant linear relationship between several or all independent variables in the regression model. If there is Multicollinearity, the regression coefficient becomes uncertain, the error rate becomes very large and is usually characterized by a very large coefficient of determination but in partial testing of the regression coefficient, there is no very large coefficient of determination even though there will be very few significant regression coefficients.

Table 4.7

Model II Test Multicollinearity

Variance Inflation Factors
Date: 10/06/18 Time: 19:27
Sample: 1 79
Included observations: 79

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	1.294902	268.9767	NA
Religion	0.026168	1.720134	1.175788
Life Expectancy	0.000187	210.7509	2.410360
Education	1.554828	319.4310	1.365947
Family	0.003527	4.508133	1.218949
GDP per capita	1.97E-11	2.915551	1.903546
Population	1.20E-19	1.219031	1.130969

Source: EViews 9

If the VIF value is < 10, there is no multicollinearity. So, based on the value of VIF (Variance Inflation Factor) it can be concluded that the regression model does not contain multicollinearity, so that further testing can be continued because it has met the testing requirements of the classic assumption that there is no multicollinearity.

4.3.1.3 Model II Heteroscedasticity Test

Heteroscedasticity is a condition where the variance of each disturbance is not constant. Heteroscedasticity tests can be done using White Heteroskedasticity available in the Eviews 9 program. The results to consider from this test are the probability Chi-square Obs * R-Squared values. If the value of Obs*R-Squared is smaller than X2 tables, there is no heteroscedasticity or vice versa.

To detect the problem of heteroscedasticity, it can be seen in the residual estimation results. If the residual moves constant it means there is no heteroscedasticity and if it forms a certain pattern it indicates the existence of heteroscedasticity. The result of heteroscedasticity test using White Heteroscedasticity is presented in the following table:

Table 4.8

Model II Test Heteroscedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.519196	Prob. F(6,72)	0.1842
Obs*R-squared	8.877488	Prob. Chi-Square(6)	0.1806
Scaled explained SS	5.624169	Prob. Chi-Square(6)	0.4666

Source: EViews 9

Models passed the heteroscedasticity test with provisions, namely:

a. If the probability Chi-square Obs * R-Squared < α, then the model does not pass the heteroscedasticity test.

b. If Obs * R-Squared > α Chi probability Chi-square value, then the model passes the heteroscedasticity test

Based on the table above, the probability Chi-square Obs*R-Squared value for the white heteroskedasticity test results is 0.1806, while the value of α with α = 0.05. Because the probability Chi-square Obs*R-Squared > α value, it can be concluded that the model passes the heteroscedasticity test.

4.3.2 Model II Cross Section Regression Analysis

The cross section regression equation is presented in the following formula:

ˆ Y = a + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + b6X6

With:

ˆ Y = Happiness index value

a = Constants

bi = Regression coefficient

X1 = Religion

X2 = Life Expectancy

X3 = Education

X4 = Family

X5 = Gross Domestic Product (GDP) per capita

X6 = Population

By using Eviews software, the results of cross section regression analysis are described as follows:

Table 4.9

The Coefficient of Cross Section Regression Model II

Dependent Variable: Y
Method: Least Squares
Date: 10/06/18 Time: 19:26
Sample: 1 79
Included observations: 79

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.095542	1.137938	-0.962744	0.3389
Religion	-0.389416	0.161765	-2.407286	0.0186
Life Expectancy	0.085156	0.013684	6.223211	0.0000
Education	0.308140	1.246927	0.247119	0.8055
Family	0.000451	0.059390	0.007599	0.9940
GDP per capita	1.66E-05	4.44E-06	3.735245	0.0004
Population	-4.32E-10	3.47E-10	-1.247563	0.2162

R-squared	0.748015	Mean dependent var	5.555506
Adjusted R-squared	0.727016	S.D. dependent var	1.180337
S.E. of regression	0.616701	Akaike info criterion	1.955568
Sum squared resid	27.38304	Schwarz criterion	2.165519
Log likelihood	-70.24495	Hannan-Quinn criter.	2.039681
F-statistic	35.62182	Durbin-Watson stat	1.188182
Prob(F-statistic)	0.000000		

Source: EViews 9

Based on the above output, there is a value of -1.095, the value of b1 is -0.389; b2 value of 0.085; b3 value of 0.308; b4 value of 0,000; b5 value of 0,000; b6 value of -0,000. Based on the data cross section regression equation is presented follow:

$\hat{Y}$ = -1,095- 0,389X1 + 0,085X2 + 0,308X3 + 0,000X4 + 0,000X5 – 0,000X6

The a and bi values in the above equation can be interpreted as follows:

a = -1,095 means: X1, X2, X3, X4, X5 and X6 are worth 0, the happiness index will be -1,095.

b1 = -0.389 means: if religion increases by 1 while the other variables are constant, the happiness index will decrease by 0.389.

b2 = 0.085 means: if the life expectancy increases by 1 while the other variables are constant, the happiness index will increase by 0.085.

b3 = 0.308 means: if education increases by 1 while the other variables are constant, the happiness index will increase by 0.308.

b4 = 0,000 means: if the birth rate increases by 1 while the other variables are constant, the happiness index will increase by 0,000.

b5 = 0,000 means: if GDP increases by 1 while the other variables are constant, the happiness index will increase by 0,000.

b6 = -0,000 means: if the population increases by 1 while the other variables are constant, the happiness index will decrease by 0,000.

4.3.3 Determination Coefficient Analysis Model II

The coefficient of determination (KD) is the square of the correlation coefficient (R) or also called R-Square. The coefficient of determination functions to find out how much the influence of the independent variables simultaneously explains the dependent variable. By using Eviews 9, the coefficient of determination can be seen in the following output table:

Table 4.10

Determination Coefficient Model II

R-squared	0.748015	Mean dependent var	5.555506
Adjusted R-squared	0.727016	S.D. dependent var	1.180337
S.E. of regression	0.616701	Akaike info criterion	1.955568
Sum squared resid	27.38304	Schwarz criterion	2.165519
Log likelihood	-70.24495	Hannan-Quinn criter.	2.039681
F-statistic	35.62182	Durbin-Watson stat	1.188182
Prob(F-statistic)	0.000000		

Source: EViews 9

From the table of output Eviews 4.10 above, it is known that the coefficient of determination or R *square* is 0.727 or 72.7%. This shows that religion, life expectancy, education, family, GDP per capita and population simultaneously give effect to the happiness index variable of 72.7%. While the remaining 27.3% is the influence of other variables not examined outside of religion, life expectancy, education, family, GDP per capita and population.

4.3.4 Model II Hypothesis Test

From the table above the hypothesis can be tested as follows:

1. The influence of religion on the index of happiness

   H0: b1 = 0 There is no religious influence on the happiness index

   H1: b1 ≠ 0 there is a religious influence on the happiness index

   Based on the results of the calculations shown in the table above, the p-value is obtained by the t-test from the religious variable of 0.018. Because the p-value is smaller than the significant level α = 5% or (0.018>

0.05), H1 is accepted; which means there is a religious influence on the index of happiness.

2. Effect of life expectancy on happiness index

   H0: b2 = 0 There is no effect of life expectancy on the index of happiness

   H2: b2 ≠ 0 there is an influence of life expectancy on the index of happiness

   Based on the results of the calculations shown in the table above, the p-value is obtained by the t-test from the life expectancy variable of 0,000. Because the p-value is smaller than the significant level α = 5% or (0,000 <0.05), H2 is accepted; which means there is an influence of life expectancy on the index of happiness.

3. The effect of education on the index of happiness

   H0: b3 = 0 There is no educational effect on the happiness index

   H3: b3 ≠ 0 there is an educational influence on the happiness index

   Based on the results of the calculations shown in the table above, the p-value is obtained by the t-test results from the education variable of 0.805. Because the p-value is greater than the significant level α = 5% or (0.805> 0.05), then H3 is rejected; which means there is no educational influence on the happiness index.

4. The effect of Family on the index of happiness

   H0: b4 = 0 There is no effect of the family on the index of happiness

   H4: b4 ≠ 0 there is an influence on the family on the index of happiness

Based on the calculation results shown in the table above, the p-value is obtained by the t-test from the birth rate variable of 0.994. Because the p-value is greater than the significant level α = 5% or (0.994 <0.05), then H4 is rejected; which means there is no effect on family on the happiness index.

5. Effect of GDP per capita on happiness index

   H0: b5 = 0 There is no influence of GDP] er capita on the index of happiness

   H5: b5 $\neq$ 0 there is an influence of GDP per capita on the index of happiness

   Based on the results of calculations shown in the table above, the p-value is obtained by the t-test from the variable GDP per capita of 0.004. Because the p-value is smaller than the significant level α = 5% or (0.004 <0.05), then H5 is accepted; which means there is an influence of GDP per capita on the index of happiness.

6. The influence of the population on the index of happiness

   H0: b6 = 0 There is no population influence on the happiness index

   H6: b6 $\neq$ 0 there is a population influence on the happiness index

   Based on the results of the calculations shown in the table above the p-value is obtained by the t-test from the population variable of 0.216. Because the p-value is greater than the significant level α = 5% or (0.216 <0.05), then H6 is rejected; which means there is no influence of the population on the index of happiness.

4.4 Discussion

4.4.1 The influence of religion on the index of happiness

Based on the results of the analysis above, there are 2 models in the analysis of this research data. Model I produces the results of data processing with regression showing coefficient value = -0.232 with sig value = 0.059 with Level of Significant = 5%, then it is stated that there is a negative religious influence but not significant to happiness index. Whereas model II produces the results of data processing with regression showing coefficient value = -0,389 with sig value = 0,018 with Level of Significant = 5%, it is stated that there is a negative religious influence and is significant towards happiness index.

In the results of model II there is a negative influence on the level of happiness. It can be interpreted that the smaller the religious value (non-Muslim country), the higher the level of happiness. This can occur because of the war in several Muslim countries in the world, so that the level of happiness in these countries is very small, so that the level of happiness in non-Muslim countries is higher.

4.4.2 Effect of life expectancy on happiness index

Based on the results of the analysis above, there are 2 models in the analysis of this research data. Model I produces the results of data processing with regression showing coefficient value = 0.073 with sig value = 0,000 with Level of Significant = 5%, it is stated that there is an influence of positive and significant life expectancy on happiness index. Whereas model II produces the

results of data processing with regression showing coefficient value = 0.085 with sig value = 0,000 with Level of Significant = 5%, it is stated that there is a positive and significant life expectancy effect on happiness index.

Life Expectancy is one of the indicators used to assess the degree of health of the population, meaning that if life expectancy increases, the health status of the population also increases and extends the life expectancy. The phenomenon of increasing life expectancy shows that the level of community welfare is increasing as well. It can be inferred that countries with high life expectancies have good health. According to Eddington & Shuman, (2005) found that there is a high correlation between happiness and health. However, the health in question is a subjective assessment that the person is a healthy person, not based on a health expert judgment, so that it can be said that people who claim to be healthy are people who have a high tendency to happiness.

4.4.3 The effect of education on the index of happiness

Based on the results of the analysis above, there are 2 models in the analysis of this research data. Model I produces the results of data processing with regression showing coefficient value = 1.517 with sig value = 0.046 with Level of Significant = 5%, it is stated that there is a positive and significant educational effect on the happiness index. Whereas model II produces the results of data processing with regression showing coefficient value = 0.308 with sig value = 0.805 with Level of Significant = 5%, it is stated that there is a positive education effect but not significant to happiness index.

According to Brown (2004) education is a conscious process of control where changes in behavior are generated within that person through within the group. From this view education is a process that starts at birth and lasts throughout life. Education can affect the country's happiness index because education is considered to be means for earning income for people in a country. Thus, when people are able to get income according to their education it can be said that the community feels happy.

4.4.4 Family influence on happiness index

Based on the results of the analysis above, there are 2 models in the analysis of this research data. Model I produces the results of data processing with regression showing coefficient value = -0.007 with sig value = 0.535 with Level of Significant = 5%, then it is stated that there is a negative family influence but not significant to happiness index. Whereas model II produces the results of data processing with regression showing coefficient value = 0,000 with sig value = 0.994 with Level of Significant = 5%, it is stated that there is a positive family effect but not significant to happiness index.

The family as the fourth variable defined married individuals who tended to be happier than those who were not married. The reason of the raise of happy married individuals is because it provides psychological and physical intimacy and the context for having children, also it builders a household are confirms their identity and social role as partners and parents and married people happier than people who are not married, divorced, split, or become a widow or widower. The birth rate has negative influence on the happiness

index. This happens because it is possible to have high costs if you have many children so that families in certain countries consider that the lower the birth rate, the higher the level of happiness.

4.4.5 Effect of GDP per capita on happiness index

Based on the results of the analysis above, there are two models in the analysis of this research data. Model I produces the results of data processing with regression showing coefficient value = 0,000 with sig value = 0,000 with Level of Significant = 5%, it is stated that there is a positive and significant effect of GDP per capita on happiness index. Whereas model II produces the results of data processing with regression showing coefficient value = 0,000 with sig value = 0.004 with Level of Significant = 5%, it is stated that there is a positive and significant effect of GDP per capita on happiness index.

According to Sukirno (2004) GDP was defined as "National income describes the level of state production achieved in a given year and changes from year to year. In this case GDP can be a benchmark for a country to see the level of welfare of its people. The high level of community welfare has a close relationship to the level of happiness. The more prosperous a country, the higher the level of happiness and satisfaction of the people. This is in line with Eddington & Shuman, (2005) who has found that there is only a small but significant correlation between person's income level and happiness level. In general, wealthier people have a higher level of happiness than those who are poorer.

4.4.6 Effect of population on happiness index

Based on the results of the analysis above, there are 2 models in the analysis of this research data. Model I produces the results of data processing with regression showing coefficient value = -0,000 with sig value = 0.444 with Level of Significant = 5%, then it is stated that there is a negative population influence but not significant to happiness index. Whereas model II produces the results of data processing with regression showing coefficient value = -0,000 with sig value = 0.216 with Level of Significant = 5%, it is stated that there is a negative population influence but not significant to happiness index

According to Oliver (2003), a small area with a small population density and the level of diversity of small populations are believed to have a high level of happiness. The smaller the population in a region, the higher the level of self-efficacy and sense of control. Relations between one citizen and other residents or between neighbors are also more interwoven than over too large areas and too many people (Hendrix & Ahern in Oliver, 2003). Oliver (2003) also added that the more dense the population in a region, the more depressed, unhappy, and dissatisfied with life in their environment.

CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Based on the analysis and discussion of the factors that influence world happiness, there are some conclusion. Those are mentioned as follows:

1. In the model Religion (*Ad-Din*), model I produced negative results does not significantly affect happiness. while model II produces negative results and significantly affect happiness. This happens because Muslim countries and non-Muslim countries are not a factor in achieving a high index of happiness because the happiness of the citizen is not determined by a particular religion but rather refers to the spirituality of each individual.
2. In the Life Expectancy (*An-Nafs*) variable model I and model II produced positive results and significantly effects happiness. The phenomenon of increasing life expectancy shows that the level of community welfare is increasing as well. It can be inferred from countries with high life expectancies that they have a good level of health, so that they have a tendency towards good happiness
3. The Education (*Al-Aql*) as variable model I produced produce positive result and significantly effects happiness. While model II produces results that are positive but not significant for happiness. This can happen because education can affect the country's happiness index because education is considered to be a means for earning income for the people in a country.

4. In the Family variable (*An-Nasl*), model I produced results that are negative but not significant for happiness. While model II produces results that are positive and not significant effects on happiness. The birth rate has a negative influence on the happiness index. This happens because it is possible to have high costs if you have many children so that families in certain countries consider that the lower the birth rate, the higher the level of happiness.
5. In the GDP per capita (*Al-Mal*), variable model I and model II produced results that are positive and significant effects on happiness. In this case GDP can be a benchmark for a country to see the level of welfare of its people. The high level of community welfare has a close relationship to the level of happiness. The more prosperous a country, the higher the level of happiness and satisfaction of the people.
6. In the Population model I and model II variables produced results that are negative but not significant for happiness. The small population density and the level of diversity of the small population are believed to have a high level of happiness. The smaller the population in a region, the higher the level of self-efficacy and sense of control.

5.2 Recommendation

Recommendation in this study are as follows:

For further research, it is recommended to add other independent variables other than the variables that have been present in this study.

References

Al-Ghazali, Imam. (1966). *Ikhtisar Ilhya Ulumuddin, terjemahan Mochtar Rasidi dan Mochtar Yahya*. Yogyakarta: PT. Al. Falah.

Amalia & Nurpita. (2017). "Analisis Indeks Kebahagiaan Masyarakat di 33 Provinsi di Indonesia." *Jurnal Ekonomi dan Bisnis*. Vol. 14 No. 3.

A. McEachern & William. (2000), *Ekonomi Makro: Pendekatan Kontemporer*. Jakarta: Salemba Empat.

Anto. (2009). Introducing an Islamic Human Development Index (I-HDI) to Measure Development in OIC Countries. *Islamic Economic Studies, Vol. 19, No. 2*

Arifin & hadi. (2009). *Membuka Cakrawala Ekonomi*. Bandung: Grafindo

Arikunto, Suharsimi. (2006). *Prosedur Penelitian, Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.

Arikunto. (2013). *Prosedur Penelitian: Suatu Pendekatan Praktik. Jakarta*: Rineka Cipta.

Aristotle. (Ed). (2004). *Nicomachean Ethic, translated and edited by Roger Crisp*. UK: Cambridge university press.

Barclay. (1984). *Teknik Analisa Data Kependudukan*. Jakarta: PT. Bina Aksara.

Blanchflower & Oswald (2011). *"International Happiness." NBER working Paper No. w16668.* Available at SSRN: https://ssrn.com/abstract=1737216.

Brown. (2004). *Language Assessment: Principle and Classroom Practices*. New York: Pearson Education.

Carr, Alan. (2004). *Positive Psychology. The Science of Happiness and Human Strengths*. New York: Brunner Routledge.

Cloutier et al. (2014). 'The Sustainable Neighborhoods for Happiness Index (SNHI): A metric for assessing a community's sustainability and potential influence on happiness." *Ecological Indicators*. Vol. 40, No.6, 147-152.

Dewantara. (1977). *Karya: Pendidikan (Cetakan Kedua)*. Yogyakarta: Majelis Luhur Taman Siswa.

Diener et. al (2003). *Subjective well-being is desirable, but not the summum bonum. Subjective well-being*. Minneapolis: University of Minnesota.

Eddy. (2007). *Psikologi Kebahagiaan*. Yogyakarta. Progressif Books. P.2.

Eddington, N. dan Shuman, R. (2005). Subjective Well Being (Happiness). *Continuing Psychology Education: 6 Continuing Education Hours*. Diunduh pada 18 Septemeber 2018 dari http://www.texcpe.com/cpe/PDF/cahappiness.pdf.

Eid et al. (2014). "Comparative Latent State–Trait Analysis of Satisfaction with Life Measures: The Steen Happiness Index and the Satisfaction with Life Scale." *Journal of Happiness Studies.* Vol. 16, issue 2, 443-453.

Gelati et al. (2006). The subjective components of happiness and their attainment: a cross-cultural comparison between italy and cuba. *Social science information*,45, 601-*603.*

Ghozali. (2011). *"Aplikasi Analisis Multivariate Dengan Program SPSS"*. Semarang:
Badan Penerbit Universitas Diponegoro

Graham. (2011). *Financial in The Great Depression*. Financial Management. (Winter).

Gundelach & Kreiner. (2004), 'Happiness and life satisfaction in advanced industrial countries', *Cross-Cultural Research*, 38 (4), 359–86.

Helliwell & Barrington-Leigh. (2010). "Measuring and understanding subjective well being." *Canadian Journal of Economics*. vol. 43, issue 3, 729-753.

Hurlock, E. B. (1997). *Psikologi Perkembangan. Suatu Pendekatan Sepanjang Rentang Kehidupan.* Jakarta: Erlangga

Kramer, A. (2010). An Unobtrusive Behavioral Model of *"Gross National Happiness"*. Paper presented at the the 28th

international conference on Human factors in computing systems, ACM.

Kuncoro. (2004). "Analisis Pengaruh Struktur Ekonomi, Upah Minimum Provinsi, Belanja Modal, dan Investasi Terhadap Ketimpangan Pendapatan di Seluruh Provinsi di Indonesia Tahun 2005-2014." *JESP-Vol. 7, No 2.*

Lopez, S.J. (2009). *The encyclopedia of positive psychology*. Malden: Blackwell Publishing Ltd.

Maharani. (2015). "Tingkat Kebahagiaan (happiness) pada mahasiswa fakultas Ilmu Pendidikan Universitas Negeri Yogyakarta". *Jurnal Riset Mahasiswa Bimbingan dan Konseling*. Vol. 4, No. 6.

Mantra, I.B. (2006). *Demografi Umum. Edisi 2. Penerbit Pustaka Pelajar*: Yogyakarta.

Miskahuddin. (2017). "Konsep Agama Menurut Al-Qur'an". *Jurnal Ilmiah Al Mu'asirah*. Vol. 14, No. 1.

Muchdie & Hartono. (2016). "Economic Development and Happiness: A Cross Nations Path Nations." *International Journal of advanced Research (IJAR)* 4(12), 989-998.

Munawir et al. (2018). "Comparison of Livable City of Three Cities in Indonesia Through Index of Happiness Data from Social Media and Urban Structure." *IOP Conference Series: Earth and Environmental Science*, Vol. 152, conference 1

Musa. (2017). "Enhancing subjective well-being through strategic urban planning: Development and application of community happiness index." *Sustainable Cities and Society*. Vol. 38, 184-194.

Myrdal, G. (1971). *The Challenge of World Poverty*. Harmlondsworth.

Notoatmodjo (1997*). Pendidikan dan Perilaku Kesehatan dalam Ilmu Kesehatan Masyarakat*. Jakarta: Rineka Cipta.

Pollard & Yusuf, F. (1989). *Teknik Demografi*. Bina Aksara. Jakarta.

Puspitorini Y.W. (2012). *Tingkah Laku Prososial dan Kebahagiaan*. Skripsi Publikasi: Fakultas Psikologi Universitas Katolik Soegijapranata.

Rahadika. (2017). "*Pengukuran Indeks kebahagiaan Menggunakan Analisis Sentiment Di Media Social Dengan Metode Naïve Bayes Classifier."* Jember: Fakultas Ilmu komputer, Universitas Jember

Rahman P.A & Siregar R.H. (2012). *Hubungan Religiusitas dengan Kebahagiaan Pada Lansia Muslim*. Skripsi Publikasi: Fakultas Psikologi Universitas Sumatera Utara

Rochajat. (2011). *Komunikasi Pembangunan Perubahan Sosial, Perspektif Dominan, Kaji Ulang dan Teori Kritis*. PT. Rajagrafindo Persada. Jakara.

Rostow, W.W, Abdul. (2004). *Ekonomi Pembangunan*. Yogyakarta: BPFE.

Seligman. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60, 410–421.

Sen. (2006). "Pembangunan Indonesia dalam pandangan Amartya Sen." IJPA-*The Indonesian Journal of Public Administration, Vol. 3 No. 1*.

Sinuraya. (1990). *Peranan Program Keluarga Berencana Pemerintah Republik Indonesia Terhadap Kependudukan dalam Ketahanan Nasional Indonesia*, Medan: USU PRESS.

Strotmann & Volkert. (2018). "Multidimensional Poverty Index and Happiness," *Journal of Happiness Studies*, *Springer*. vol. 19(1), pages 167-189

Subandi. (2011). *Ekonomi Pembangunan*. Jakarta: Alfabeta.

Sudjana. (2005). *Metode Statistika Edisi ke-6.* Bandung: Tarsito

Sugiyono. (2013). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D.* Bandung: Alfabeta

Sukirno, Sadono. (2004). *Pengantar Teori Makroekonomi*. Jakarta: PT Raja Grafindo Persada.

Todaro, M. P., & Smith, S. C. (2012). *Economic development*. Boston, Mass: Addison

.

Uhbiyati. (2007). *Ilmu Pendidikan*. Jakarta: PT Rineka Cipta.

Veenhoven, Ruut. (2006). Healthy Happiness: Effects of happiness on physical health and the consequences for preventive health care. *Journal of Happiness Studies* (Vol 9.). Hlm. 1-26.

Wang et al. (2012). Can Well-Being be Measured Using Facebook Status Updates? Validation of Facebook's Gross National Happiness Index." *Journal Social Indicators Research.* Vol. 115, No. 1.

WB (World Bank).

WHR (World Happiness Report)

Zahidah & Raihanah. (2011). The Model of Wellbeing in Family Life from Islami Perspective. *Jurnal Fiqh*, 8, 25-44

[UNDP] United Nations of Development Programme.Human Development Report Tahun 1990-2011. New York: Oxford University Press.

APPENDICES

RESEARCH DATA

COUNTRY	YEAR	(Y)	(X1)	(X2)	(X3)
norway	2016	7.537	0	82.5097561	0.983709991
DNK	2016	7.522	0	80.70487805	1.009670019
ISL	2016	7.504	0	82.46829268	1.00379002094269 (data obtained in 2015)
Switzerland	2016	7.494	0	82.89756098	0.976130009
Finland	2016	7.469	0	81.7804878	1.057549953
Netherland	2016	7.377	0	81.5097561	1.009699941
Canada	2016	7.316	0	82.3005122	1.007869959
New Zealand	2016	7.314	0	81.61243902	1.037819982
Australia	2016	7.284	0	82.5	0.924979985
Sweden	2016	7.284	0	82.20487805	1.09098994731903 (data obtained in 2015)
ISRAEL	2016	7.213	0	82.40731707	1.012920022
Costa Rica	2016	7.079	0	79.831	1.029330015
Austria	2016	7.006	0	80.8902439	0.971989989
US	2016	6.993	0	78.6902439	1.02662003040314 (data obtained in 2015)
Irelandia	2016	6.977	0	81.60731707	1.009789944
Germany	2016	6.951	0	80.64146341	0.965129971504211 (data obtained in 2015)
Belgium	2016	6.891	0	80.99268293	1.08054995536804 (data obtained in 2015)
Luxemburg	2016	6.863	0	82.29268293	1.02145004272461 (data obtained in 2015)
UK	2016	6.714	0	80.95609756	1.01768004894257 (data obtained in 2015)
Chile	2016	6.652	0	79.522	0.992060006
United Arab Emirates	2016	6.648	1	77.256	0.952809989
Brazil	2016	6.635	0	75.509	1.01794004440308 (data obtained in 2015)
Czech Rep	2016	6.609	0	78.33170732	1.007159948349 (data obtained in 2015)
Argentina	2016	6.599	0	76.577	1.02662003040314 (data obtained in 2015)
Mexico	2016	6.578	0	77.118	1.044029951
Singapore	2016	6.572	0	82.79512195	0.995180011
Malta	2016	6.527	0	81.79756098	1.040159941
Uruguay	2016	6.454	0	77.493	1.04141998291016 data obtained in 2015)
Guatemala	2016	6.454	0	73.409	0.960380018
Panama	2016	6.452	0	78.001	1.00686001777649 (data obtained in 2015)
France	2016	6.442	0	82.27317073	1.00362002849579 (data obtained in 2015)
Thailand	2016	6.424	0	75.303	0.952939987182617 (data obtained in 2015)
Spain	2016	6.403	0	82.83170732	1.009039998
Qatar	2016	6.375	1	78.184	1.069409966
Columbia	2016	6.357	0	74.381	1.017560005
Saudi Arabia	2016	6.344	1	74.561	0.87092000246048 (data obtained in 2014)

Trinidad & Tobago	2016	6.168	0	70.673	1.02664995193481 (data obtained in 1990)
Kuwait	2016	6.105	1	74.694	1.06094002723694 (data obtained in 2015)
Slovakia	2016	6.098	0	76.56341463	1.00477004051208 (data obtained in 2015)
Bahrain	2016	6.087	1	76.9	1.014940023
Malaysia	2016	6.084	1	75.3	1.033360004
Nicaragua	2016	6.071	0	75.404	1.03534996509552 (data obtained in 2010)
Ecuador	2016	6.008	0	76.327	1.020169973
El Salvador	2016	6.003	0	73.512	0.97608
Poland	2016	5.973	0	77.45121951	0.990909994
Uzbekistan	2016	5.971	1	71.314	0.986429989
Italy	2016	5.964	0	82.54390244	0.982999980449677 (data obtained in 2015)
Russia	2016	5.963	0	71.59292683	0.993070006
Belize	2016	5.956	0	70.384	0.976010025
Japan	2016	5.92	0	83.98487805	1.00462996959686 (data obtained in 2015)
Lithiuania	2016	5.902	0	74.32195122	0.967440009
Algeria	2016	5.872	1	76.078	0.994189977645874 (data obtained in 2011)
Latvia	2016	5.85	0	74.52926829	0.990490019321442 (data obtained in 2015)
South Korea	2016	5.838	0	82.02439024	1.00276005268097 (data obtained in 2015)
Moldova	2016	5.838	0	71.61	1.00120997428894 (data obtained in 2015)
Romania	2016	5.825	0	75.01219512	0.990390003
Bolivia	2016	5.823	0	69.125	0.978320003
Turkmenistan	2016	5.822	1	67.835	0.966620028018951 (data obtained in 2014)
Khazakhtan	2016	5.819	1	72.3	1.016260028
Slovenia	2016	5.758	0	80.77560976	1.00326001644135 (data obtained in 2015)
Peru	2016	5.715	0	74.983	1.000609994
Mauritius	2016	5.629	0	74.39487805	1.039450049
Cyprus	2016	5.621	0	80.508	0.996190011501312 (data obtained in 2015)
Estonia	2016	5.611	0	77.73658537	0.998870015144348 (data obtained in 2015)
Belarus	2016	5.569	0	73.82682927	0.991460025
Turkey	2016	5.5	1	75.755	0.980139970779418 (data obtained in 2015)
Paraguay	2016	5.493	0	73.12	1.009320021
Philippines	2016	5.43	0	69.094	1.00882995128632 (data obtained in 2015)
Serbia	2016	5.395	0	75.23902439	1.008100033
Jordan	2016	5.336	0	74.329	1.02661001682281 (data obtained in 2000)
Hungary	2016	5.324	1	75.56829268	0.998870015
Jamaica	2016	5.311	0	75.97	1.00899994373322 (data obtained in 2000)
Croatia	2016	5.293	0	78.02195122	1.034080029
China	2016	5.273	0	76.252	1.011940002
Pakistan	2016	5.269	0	66.481	0.838159978
Indonesia	2016	5.262	0	69.191	0.995249987
venezuela	2016	5.25	1	74.545	1.015450001

montonegro	2016	5.237	1	77.116	0.988110006
Morocco	2016	5.235	0	75.821	0.9130499958992 (data obtained in 2012)
Dominician Rep	2016	5.23	1	73.861	0.991810024
Greece	2016	5.227	1	81.03658537	0.961749970912933 (data obtained in 2015)
Lebanon	2016	5.225	0	79.584	0.949890018
Portugal	2016	5.195	0	81.12682927	0.970009983
Honduras	2016	5.181	0	73.575	1.050750017
Macedonia	2016	5.175	0	75.703	0.988179981708527 (data obtained in 2015)
Nigeria	2016	5.074	1	53.428	0.952499985694885 (data obtained in 2013)
Tajikistan	2016	5.041	0	71.051	0.929099977016448 (data obtained in 2013)
Bhutan	2016	5.011	1	70.197	1.044219971
Kyrgyzstan	2016	5.004	1	70.95121951	0.996159971
Nepal	2016	4.962	0	70.253	1.078420043
Mongolia	2016	4.955	1	69.287	0.992510021
South Africa	2016	4.829	0	62.774	0.951690018177032 (data obtained in 2015)
Tunisia	2016	4.805	0	75.731	1.037889957
Egypt	2016	4.735	0	71.484	0.992739975
Bulgaria	2016	4.714	1	74.61463415	0.976090014
Sierra Leone	2016	4.709	1	51.835	0.97845
Cameroon	2016	4.695	0	58.073	0.886900008
Iran	2016	4.692	1	75.953	1.03498005867004 (data obtained in 2015)
Albania	2016	4.644	1	78.345	0.945469975
Bangladesh	2016	4.608	1	72.489	1.080780029
Namibia	2016	4.574	1	64.388	1.03498005867004 (data obtained in 2000)
Kenya	2016	4.553	1	67.032	0.955060005187988 (data obtained in 2009)
Mozambique	2016	4.55	0	58.311	0.915369987487792 (data obtained in 2015)
Myanmar	2016	4.545	0	66.612	0.974265344112 (data obtained in 2015)
Senegal	2016	4.535	1	67.146	1.080369949
iraq	2016	4.497	1	69.862	0.77224999666214 (data obtained in 2000)
Ethiopia	2016	4.46	1	65.475	0.920340001583099 (data obtained in 2015)
Srilanka	2016	4.44	1	75.284	1.011600018
Armenia	2016	4.376	0	74.618	1.03787004947662 (data obtained in 2015)
India	2016	4.315	0	68.56	1.092859983
Mauritania	2016	4.292	0	63.238	1.039289951
Congo Rep	2016	4.291	0	64.625	1.00180995464325 (data obtained in 2012)
Georgia	2016	4.286	1	73.261	1.01244998
Congo Dem Rep	2016	4.28	0	59.621	0.889490008354187 (data obtained in 2015)
Mali	2016	4.19	0	57.966	0.838020027
Cambodia	2016	4.168	0	68.981	0.914849996566772 (data obtained in 2008)
Sudan	2016	4.139	1	64.486	0.937820017337799 (data obtained in 2015)
Ghana	2016	4.12	0	62.742	0.997500002

Ukraine	2016	4.096	1	71.47634146	0.994140028953552 (data obtained in 2014)
Uganda	2016	4.081	0	59.889	0.778230011463165 (data obtained in 1990)
Burkina Faso	2016	4.032	0	60.361	0.971310019
Niger	2016	4.028	1	53.428	0.952499985694885 (data obtained in 2013)
Malawi	2016	3.97	1	63.223	1.001080036
Chad	2016	3.936	1	52.903	0.705579996
Zimbabwe	2016	3.875	0	61.163	0.982420027256011 (data obtained in 2013)
Leshoto	2016	3.808	1	54.174	1.054909945
Angola	2016	3.795	0	61.547	0.620949983596802 (data obtained in 2015)
Afghanistan	2016	3.794	0	63.673	0.651989996433258 (data obtained in 2015)
Boswana	2016	3.766	0	66.797	1.01048004627228 (data obtained in 2008)
Benin	2016	3.657	1	60.907	0.859269976615906 (data obtained in 2015)
Madagaskar	2016	3.644	0	65.932	0.996739984
Yemen	2016	3.593	0	64.953	0.822149992
South Sudan	2016	3.591	0	56.811	0.685739994049072 (data obtained in 2015)
Liberia	2016	3.533	1	62.505	0.869710028171539 (data obtained in 2015)
Guinea	2016	3.507	0	60.015	0.787739992141724 (data obtained in 2014)
Togo	2016	3.495	0	60.232	0.693210005760193 (data obtained in 2000)
Rwanda	2016	3.471	1	67.129	1.013929963
Syria	2016	3.462	0	70.31	0.986660003662109 (data obtained in 2013)
Tanzania	2016	3.349	0	65.675	0.996410012245178 (data obtained in 2013)
Burundi	2016	2.905	1	57.481	0.991580009
Central African Rep	2016	2.693	0	52.171	0.745689988

COUNTRY	YEAR	(Y)	(X1)	(X2)	(X3)	(X4)
Norway	2016	7.537	0	82.5097561	0.983709991	2.185153
Denmark	2016	7.522	0	80.70487805	1.009670019	0.951272
Iceland	2016	7.504	0	82.46829268	1.003790021	3.483809
Switzerland	2016	7.494	0	82.89756098	0.976130009	0.754097
Finland	2016	7.469	0	81.7804878	1.057549953	1.290354
Netherland	2016	7.377	0	81.5097561	1.009699941	1.074736
canada	2016	7.316	0	82.3005122	1.007869959	0.435515
New Zealand	2016	7.314	0	81.61243902	1.037819982	1.290354
Australia	2016	7.284	0	82.5	0.924979985	2.19836E
Sweden	2016	7.284	0	82.20487805	1.090989947	1.31642
ISRAEL	2016	7.213	0	82.40731707	1.012920022	0.97157

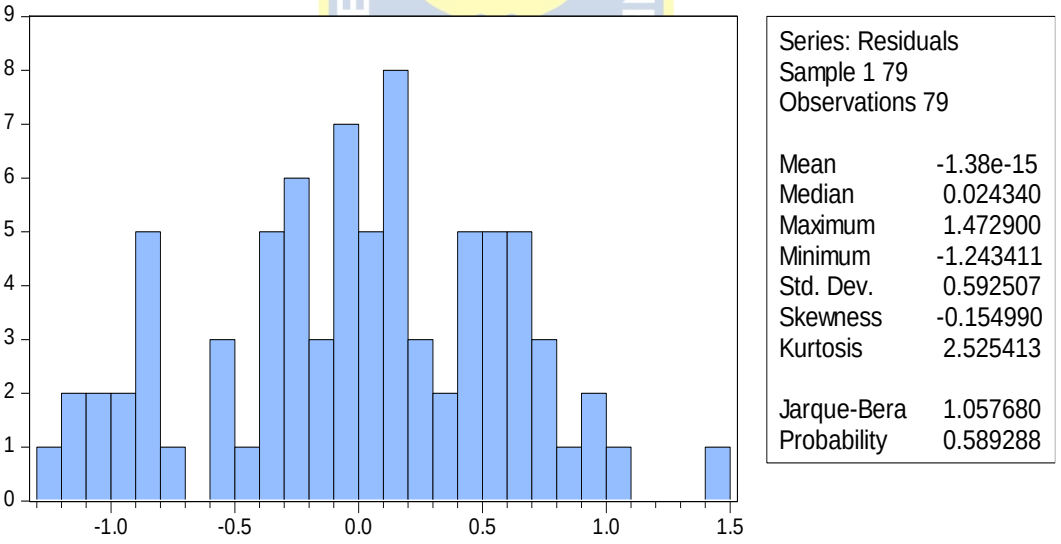
Costa Rica	2016	7.079	0	79.831	1.029330015	0.188424
Austria	2016	7.006	0	80.8902439	0.971989989	2.059428
US	2016	6.993	0	78.6902439	1.02662003	3.171538
Irelandia	2016	6.977	0	81.60731707	1.009789944	2.815333
Chile	2016	6.652	0	79.522	0.992060006	5.612168
United Arab Emirates	2016	6.648	1	77.256	0.952809989	3.665896
Mexico	2016	6.578	0	77.118	1.044029951	4.205835
Singapore	2016	6.572	0	82.79512195	0.995180011	1.330071
Malta	2016	6.527	0	81.79756098	1.040159941	2.470823
Guatemala	2016	6.454	0	73.409	0.960380018	2.542392
Spain	2016	6.403	0	82.83170732	1.009039998	2.62969
Qatar	2016	6.375	1	78.184	1.069409966	1.198964
Columbia	2016	6.357	0	74.381	1.017560005	3.235098
Bahrain	2016	6.087	1	76.9	1.014940023	1.775394
Malaysia	2016	6.084	1	75.3	1.033360004	1.609759
Ecuador	2016	6.008	0	76.327	1.020169973	3.569311
El Salvador	2016	6.003	0	73.512	0.97608	4.6846
Poland	2016	5.973	0	77.45121951	0.990909994	2.772638
Uzbekistan	2016	5.971	1	71.314	0.986429989	1.441163
Russia	2016	5.963	0	71.59292683	0.993070006	2.925506
Belize	2016	5.956	0	70.384	0.976010025	4.343798
Lithiuania	2016	5.902	0	74.32195122	0.967440009	2.149433
Romania	2016	5.825	0	75.01219512	0.990390003	3.746755
Bolivia	2016	5.823	0	69.125	0.978320003	1.870780
Khazakhtan	2016	5.819	1	72.3	1.016260028	2.492614
Peru	2016	5.715	0	74.983	1.000609994	3.163490
Mauritius	2016	5.629	0	74.39487805	1.039450049	1.965678
Belarus	2016	5.569	0	73.82682927	0.991460025	4.610153
Paraguay	2016	5.493	0	73.12	1.009320021	2.84439
Serbia	2016	5.395	0	75.23902439	1.008100033	3.328482
Hungary	2016	5.324	0	75.56829268	0.998870015	3.808730
Croatia	2016	5.293	0	78.02195122	1.034080029	1.994553
China	2016	5.273	0	76.252	1.011940002	0.656808
Pakistan	2016	5.269	1	66.481	0.838159978	0.478314
Indonesia	2016	5.262	1	69.191	0.995249987	1.817962
Venezuela	2016	5.25	0	74.545	1.015450001	5.265865
Montonegro	2016	5.237	0	77.116	0.988110006	3.185157
Dominician Rep	2016	5.23	0	73.861	0.991810024	3.130345
Lebanon	2016	5.225	1	79.584	0.949890018	1.503234
Portugal	2016	5.195	0	81.12682927	0.970009983	2.831028
Honduras	2016	5.181	0	73.575	1.050750017	3.860074

Bhutan	2016	5.011	0	70.197	1.044219971	0.681487
Kyrgyzstan	2016	5.004	1	70.95121951	0.996159971	1.839431
Nepal	2016	4.962	0	70.253	1.078420043	1.799513
Mongolia	2016	4.955	0	69.287	0.992510021	1.353608
Tunisia	2016	4.805	1	75.731	1.037889957	0.561794
Egypt	2016	4.735	1	71.484	0.992739975	2.235192
Bulgaria	2016	4.714	0	74.61463415	0.976090014	5.301736
Sierra Leone	2016	4.709	1	51.835	0.97845	1.018333
Cameroon	2016	4.695	1	58.073	0.886900008	1.365518
Albania	2016	4.644	1	78.345	0.945469975	1.531822
Bangladesh	2016	4.608	1	72.489	1.080780029	2.468064
Senegal	2016	4.535	1	67.146	1.080369949	1.589541
Srilanka	2016	4.44	0	75.284	1.011600018	1.577212
India	2016	4.315	0	68.56	1.092859983	0.570590
Mauritania	2016	4.292	1	63.238	1.039289951	0.988982
Georgia	2016	4.286	0	73.261	1.01244998	4.397383
Mali	2016	4.19	1	57.966	0.838020027	1.546858
Ghana	2016	4.12	0	62.742	0.997500002	1.150408
Burkina Faso	2016	4.032	1	60.361	0.971310019	1.259394
Malawi	2016	3.97	0	63.223	1.001080036	2.559110
Chad	2016	3.936	1	52.903	0.705579996	1.292348
Leshoto	2016	3.808	0	54.174	1.054909945	0.959493
Madagaskar	2016	3.644	0	65.932	0.996739984	2.406862
Yemen	2016	3.593	1	64.953	0.822149992	1.117830
Rwanda	2016	3.471	0	67.129	1.013929963	0.695646
Burundi	2016	2.905	0	57.481	0.991580009	0.382170
Central African Rep	2016	2.693	0	52.171	0.745689988	0.855886

- Descriptive Statistic

	X1	X2	X3	X4	X5	X6
Mean	0.278481	4.286613	-1.973159	0.204454	6.12E+11	62439772
Median	0.000000	4.311403	-2.421390	0.617906	5.32E+10	10524117
Maximum	1.000000	4.417606	0.000000	1.724937	1.86E+13	1.38E+09
Minimum	0.000000	3.948066	-7.402366	-29.14589	3.882497	335439.0
Std. Dev.	0.451116	0.116143	2.110295	3.435546	2.43E+12	2.16E+08
Skewness	0.988369	-1.266873	-0.434804	-8.140848	6.330838	5.492103
Kurtosis	1.976874	4.155645	1.896982	70.08434	44.00155	32.86704
Jarque-Bera	16.30785	25.52813	6.494018	15487.56	6061.424	3333.446
Probability	0.000288	0.000003	0.038890	0.000000	0.000000	0.000000
Sum	22.00000	338.6424	-155.8795	15.94745	4.84E+13	4.93E+09
Sum Sq. Dev.	15.87342	1.052162	347.3609	908.8291	4.60E+26	3.65E+18
Observations	79	79	79	79	79	79

- Normality Test



- Multicollinierity Test

Variance Inflation Factors
Date: 10/06/18 Time: 19:27
Sample: 1 79
Included observations: 79

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	1.294902	268.9767	NA
Agama	0.026168	1.720134	1.175788
Angka Harapan Hidup	0.000187	210.7509	2.410360
Pendidikan	1.554828	319.4310	1.365947
Angka Kelahiran	0.003527	4.508133	1.218949
GDP	1.97E-11	2.915551	1.903546
Populasi	1.20E-19	1.219031	1.130969

- Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.519196	Prob. F(6,72)	0.1842
Obs*R-squared	8.877488	Prob. Chi-Square(6)	0.1806
Scaled explained SS	5.624169	Prob. Chi-Square(6)	0.4666

- Result of the Test

Dependent Variable: Y
Method: Least Squares
Date: 10/06/18 Time: 19:26
Sample: 1 79
Included observations: 79

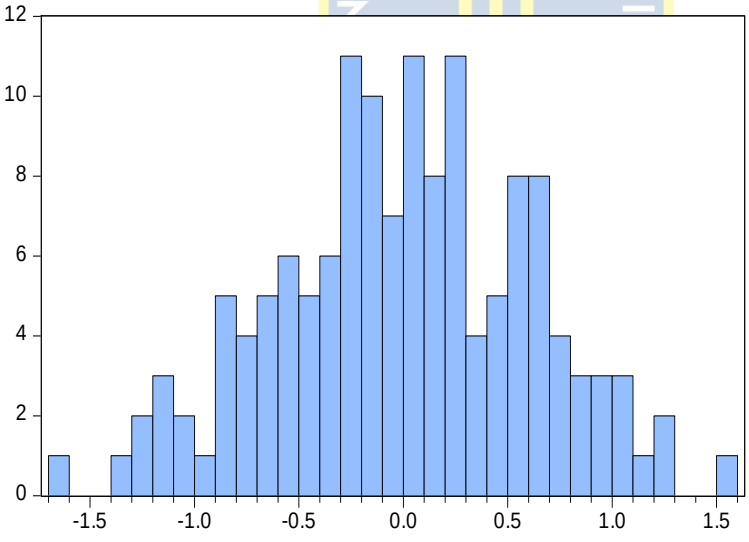
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.095542	1.137938	-0.962744	0.3389
X1	-0.389416	0.161765	-2.407286	0.0186
X2	0.085156	0.013684	6.223211	0.0000
X3	0.308140	1.246927	0.247119	0.8055
X4	0.000451	0.059390	0.007599	0.9940
X5	1.66E-05	4.44E-06	3.735245	0.0004
X6	-4.32E-10	3.47E-10	-1.247563	0.2162

R-squared	0.748015	Mean dependent var	5.555506
Adjusted R-squared	0.727016	S.D. dependent var	1.180337
S.E. of regression	0.616701	Akaike info criterion	1.955568
Sum squared resid	27.38304	Schwarz criterion	2.165519
Log likelihood	-70.24495	Hannan-Quinn criter.	2.039681
F-statistic	35.62182	Durbin-Watson stat	1.188182
Prob(F-statistic)	0.000000		

- Descriptive Statistic

	X1	X2	X3	X4	X5	X6
Mean	0.297872	72.25987	0.975248	2.683810	13551.44	51824814
Median	0.000000	74.39500	0.996000	1.818000	4878.570	11917508
Maximum	1.000000	83.98500	1.098000	53.01700	100738.7	1.38E+09
Minimum	0.000000	51.83500	0.621000	0.000210	122.1900	335439.0
Std. Dev.	0.458953	8.030868	0.084424	5.009523	18984.33	1.65E+08
Skewness	0.883960	-0.702312	-2.114693	8.229209	2.009404	7.094238
Kurtosis	1.781385	2.699848	7.902301	78.17326	6.914130	55.84708
Jarque-Bera	27.08706	12.12049	246.2815	34791.15	184.8935	17590.49
Probability	0.000001	0.002334	0.000000	0.000000	0.000000	0.000000
Sum	42.00000	10188.64	137.5100	378.4172	1910753.	7.31E+09
Sum Sq. Dev.	29.48936	9029.277	0.997828	3513.345	5.05E+10	3.80E+18
Observations	141	141	141	141	141	141

- Normality Test



Series: Residuals
Sample 1 141
Observations 141

Mean	-1.20e-15
Median	0.012621
Maximum	1.531204
Minimum	-1.613894
Std. Dev.	0.611913
Skewness	-0.108138
Kurtosis	2.681477
Jarque-Bera	0.870863
Probability	0.646985

- Multicollinierity Test

Variance Inflation Factors
Date: 09/15/18 Time: 12:13
Sample: 1 141
Included observations: 141

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.500589	180.4254	NA
X1	1.07E-19	1.140800	1.037499
X2	0.568286	196.2606	1.449506
X3	9.84E-05	187.5460	2.272236
X4	1.30E-11	2.530411	1.672245
X5	0.000115	1.327806	1.030051
X6	0.014914	1.601215	1.124257

- Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.931913	Prob. F(6,134)	0.4743
Obs*R-squared	5.647896	Prob. Chi-Square(6)	0.4638
Scaled explained SS	4.288635	Prob. Chi-Square(6)	0.6377

- Result of the Test

Dependent Variable: Y
Method: Least Squares
Date: 09/15/18 Time: 12:10
Sample: 1 141
Included observations: 141

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.578153	0.707523	-2.230533	0.0274
X1	-0.232231	0.122124	-1.901595	0.0594
X2	0.073305	0.009922	7.388096	0.0000
X3	1.517257	0.753847	2.012685	0.0462
X4	-0.006667	0.010710	-0.622544	0.5346
X5	2.11E-05	3.60E-06	5.857536	0.0000
X6	-2.51E-10	3.27E-10	-0.768532	0.4435

R-squared	0.722793	Mean dependent var	5.384305
Adjusted R-squared	0.710381	S.D. dependent var	1.162218
S.E. of regression	0.625463	Akaike info criterion	1.947720
Sum squared resid	52.42125	Schwarz criterion	2.094112
Log likelihood	-130.3143	Hannan-Quinn criter.	2.007209
F-statistic	58.23221	Durbin-Watson stat	1.183807
Prob(F-statistic)	0.000000		