IOSR Journal of Economics and Finance (IOSR-JEF)
e-ISSN: 2321-5933, p-ISSN: 2321-5925.Volume 9, Issue 1 Ver. III (Jan.- Feb .2018), PP 46-52
www.iosrjournals.org

Analysis of the Impact of Unemployment and Inflation Rate toward Economic Growth In The Regency of Timor Tengah Utara

Emanuel Be Haukilo
(Faculty of Economic and Business, University of Timor, Indonesia)
Corresponding Author: Emanuel Be Haukilo

Abstract: *Unemployment and inflation rate in the regency of Timor Tengah Utara (TTU) remains a quite serious problem. This research was conducted in the regency of TTU by using simple and multiple regression analysis. Analysis result of research data found that high rate of unemployment in general was affected as the result of the decline of economic activity or the aggregate effective demand of manpower which was too small in public economy if compared to aggregate supply so that unemployment rate in the regency of TTU might be less if public economic activity could be increased. Meanwhile inflation rate in the regency of TTU emerged due to the presence of aggregate demand pressure of various public staple goods which increasing from time to time. Unemployment and inflation rate in the regency of TTU might affect economic growth due to the tendency of the price of goods especially staple goods to increase faster compared to the increase of income received by the people, so that with low income of people they could not fulfill their needs. The low income was due to the high unemployment rate in society. To escape from both problems is by real effort that must be performed by government of the regency of TTU to improve economic growth namely by various labor intensive programs involving many workforces so that it may increase people income which eventually may increase aggregate supply for various staple goods in community.*

Key words*: Unemployment, inflation and economic growth.*

Date of Submission: 20-01-2018 Date of acceptance: 09-02-2018

I. Introduction

Problems of unemployment and inflation remains very complicated and is a strategic issue in every country since it may be related to multiple certain economic indicators. Economic indicators which are affecting unemployment rate among others is economic growth of those countries, and inflation rate. If in a country its economic growth experiencing an increase/improvement, it is expected to have an effect on the decline of unemployment rate meanwhile if inflation rate is high it will have an effect on the increase of unemployment rate.

Economic growth is one of indicators which is very important in assessing the performance of economic matters, especially to conduct analysis regarding the outcome of economic development which has been carried out by a country or a region. An economy is said to undergo a growth if the production of goods and services increase from the previous year. Economic growth shows how far economic activity may result in extra income or welfare of a community in certain period. Economic growth of a country or a region which constantly shows an improvement illustrates that the economy of that country or region is well developed.

Every country in the world is surely facing inflation issue in its economic matters. Therefore, inflation rate occurred in one country is one of criteria to measure the good and bad of economic problem faced by any country. For a country which has good economy, inflation rate which has occurred ranging between 2-4 percent per year. With percentage of that amount, it can be said as low inflation meanwhile high inflation rate is over 30 percent. But there are countries which facing very high inflation rate which is called hyper-inflation. If one country undergoes hyper-inflation it certainly will find that the number of unemployment in that country will increase drastically. Due to the increase of prices in every sector, so companies will take a policy to reduce cost of producing goods or services by way of reducing staffs or workforces. As the consequence high unemployment rate cannot be avoided and may make the economy of that country experiencing a decline. Therefore, inflation is closely related with unemployment rate.

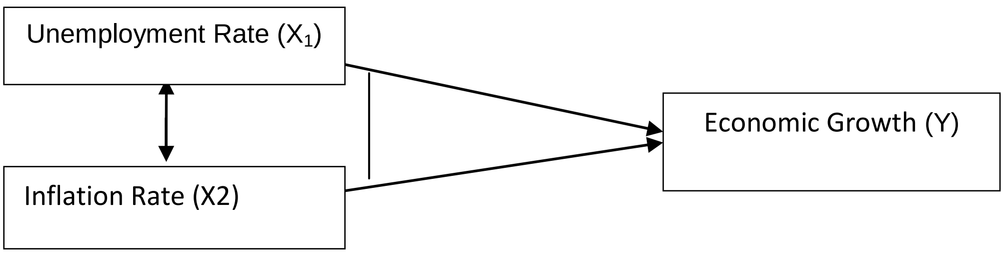
In connection with unemployment and inflation rate in the regency of Timor Tengah Utara as one of autonomous regions also cannot be separated from economic problem being encountered. In general economic problem in relation to economic growth is influenced by various economic indicators among others are unemployment rate and inflation rate. Unemployment rate in the regency of Timor Tengah Utara (TTU) from time to time undergoes a decline if being seen from the number of labor aspect. But If viewed from employment availability aspect then the unemployment is still high in this region due to the lack of employment. Meanwhile inflation issue in the regency of TTU undergoes high fluctuation rate. Inflation problem in the regency of TTU also cannot be separated from economic problem both nationally and economic turmoil in international world. It triggers inflation issue in relation to circulated amount of money

and produced goods and services. Both problems mentioned above may trigger a decrease in economic growth rate in the regency of TTU from year to year.

II. Frame Of Thinking

Inflation is the process of price increase which applied in economic matters, whereas inflation rate is the presentation of price increase of goods in certain period (SadonoSukirno, 2005). With the occurrence of higher inflation rate then it will lead to decreased economic growth rate so that there will be an increase in unemployment rate. Traditional view regarding the relationship between negative unemployment rate with inflation and unemployment as depicted with Philips' curve is different with Friedman's view which stated that inflation has a movement unidirectional with unemployment. When the price of goods and services increases, unemployment rate will also increase. Inflation due to the increase of production cost will drive companies to reduce the production of goods and services to achieve efficient production level. By reducing production level will result in the usage of production factors, including manpower being used in production activity will be reduced. This will increase unemployment rate. So the price increase of goods and services will increase unemployment rate.

Any nation surely will try to halt inflation rate which increasingly higher, because by the rise of inflation it will create unemployment. In general, economic growth is defined as the improvement in the capability of one economy to produce goods and services. In other words, economic growth is more referring to quantitative changes and the cost is measured by using data from Gross Domestic Product (PDB) or output income per capita. Gross Domestic Product (PDB) is total market value from final products and services produced in one economy during certain period (usually one year). Based on description above, the frame of thinking can be illustrated as follows:



III. Theory Of Economic Growth

According to SadonoSukirno, economic growth meant the progress in activity of one economy which resulted in goods and services produced in the society increased and people welfare improved. Therefore to set the achieved economic growth rate it is necessary to calculate real national income according to fixed price namely to applicable prices in selected base year. So, economic growth measures the achievement of the progress of one economy. Therefore the concept which is matching with economic growth is GDP/PDB with constant price. GDP/PDB is the price of goods and services being produced within one country during certain year. Meanwhile Gross National Product is the prices of goods and services being calculated within national income and only goods and services being produced by production factors owned by citizens from the country which its national income is calculated.

The output or national income is the most comprehensive measurement of economic activity level from one country. One of measurements which commonly used for output is Gross Domestic Product (GDP) or PDB. GDP/PDB can be seen as total economy from everybody in one economic system or as total expenditure on output of economic goods and services. This output is stated in currency unit (rupiah) as the sum of total output of goods and services multiplied by the price per unit. The sum of total often referred as nominal output, which may be changed due to alteration both in physical amount and price change toward its basic period. To find out how far the alteration because of just physical change, then output value is measured not on current price but on price applicable in basic period selected. The sum of total is referred as real output. The percentage change from real output is referred as economic growth. Assessment regarding the fast or slow of economic growth must be compared with growth in the past and growth achieved by the other regions. In other words, one region can be said to undergo fast growth if from year to year experiencing significant increase. Meanwhile it is said to undergo slow growth, if from year to year it is experiencing decline or fluctuation.

Factors considered as important sources which affecting economic growth among others are:
1. Land and other properties
2. Amount, quality of people and manpower
3. Capital goods and level of technology
4. Social system and people's attitude
5. Market area and source of growth.

Inflation rate has positive or negative relationship toward unemployment rate. If inflation rate being calculated is inflation occurred on prices in general, then the occurring inflation rate height will result in the increase of interest rate (loan). Therefore, with high interest rate will reduce investment to develop productive sectors. This will affect in high unemployment rate due to the lack of job opportunity as the result of low investment.

IV. Research Method

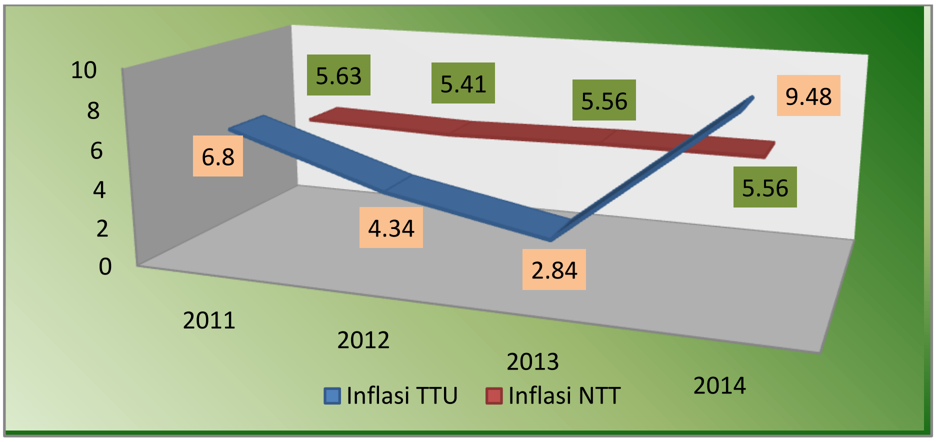
The setting of research location was based on consideration on required data namely time series data in the form of secondary data which could be obtained in BPS so that research location was conducted in Statistical Center Agency of TTU Regency. Data analysis technique being used was simple regression analysis and multiple regression.

a. Descriptive Analysis
b. Simple Linear Regression Analysis
c. Multiple Linear Regression Analysis

V. Discussion

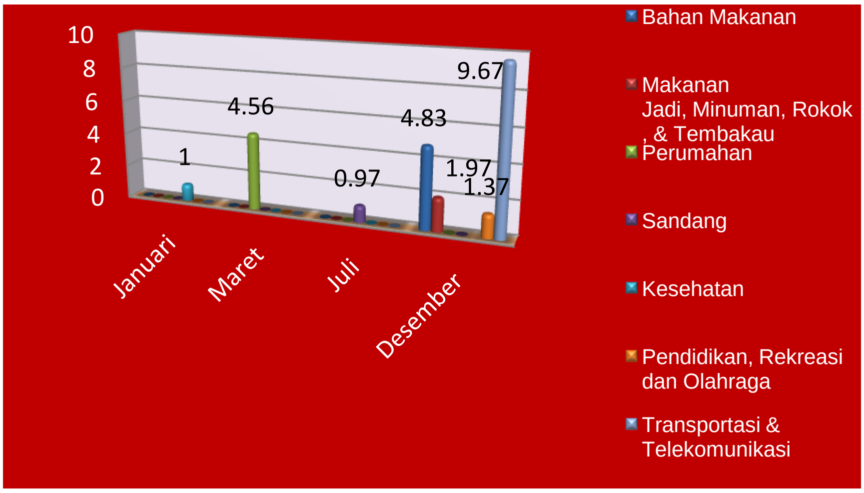
a. Descriptive Analysis Inflation Rate

The symptom of price increase on goods and services in general is widely known as inflation. There are many factors which lead to inflation among others due to demand capacity toward some goods and services exceeding its stock volume, the increase of input structuring price of imported goods which very susceptible toward foreign currency exchange rate, economic structure which is unbalanced and the amount of money circulated in people's hand. Therefore the effort of inflation prevention must be started from careful observation toward primary cause factor of inflation in one region. Inflation rate in TTU Regency in 2014 was at 9.48%, almost 4 times higher from inflation in 2013. Multiple things which affected the increase of inflation rate in 2014 was market reaction toward the process of president election in Indonesia and the weaken of rupiah exchange rate toward dollar which reaching Rp. 14,000/USD in November 2014 which triggered the price soaring of various commodities in December 2014 at the same time with Christmas and New Year of 2015.



Source: BPS distric TTU, Data and Information Statistics, 2017

Meanwhile inflation rate in Kefamenanu city is at 9.48% classified according to Consumer Goods Group, contributed by Transportation and Communication (26.99%), processed foods, beverage, cigarettes and tobaccos (8.60%), food-stuffs (7.18%), housing (6.15%), Education, recreation and sport (4.67%), health (3.15%), and clothing (2.67%). Viewed from monthly inflation distribution, the highest inflation number according to consumer goods among others are: the highest of Transportation and communication occurred in December (9.67%); group of processed foods, beverages, cigarettes and tobaccos occurred in December (1.97%); group of foodstuffs occurred in December (4.83%); Housing in March (4.56%), Education, recreation and sport occurred in December (1.37%); Health in January (1.00%) and Clothing occurred in July (0.97%). The highest inflation in Kefamenanu city in 2015 according to the Component of Staple Goods and occurring month can be seen below:



Source: BPS distric TTU, Data and Information Statistics, 2017

1. Simple Linear Regression Analysis

a) Analysis of the Effect on Unemployment Rate toward Inflation rate in the Regency of TTU.

To find out the effect between variable of unemployment rate toward variable of Inflation rate, it may use simple linear regression analysis tools. The magnitude of regression value between variable of unemployment rate toward variable of Inflation rate is as follows: score of α = 0.306 explains that if there is not any change on variable of unemployment rate, then variable score of inflation rate is at 0.306. But if there is any addition on variable of unemployment rate by 1 unit, then inflation rate will increase by 0.453. The size of coefficient value of variable correlation on unemployment rate toward variable of inflation rate by 0.578 which means that relationship between variable of unemployment rate toward variable of inflation rate has strong relationship. Determination coefficient explains that magnitude variation of inflation rate is determined by variable of unemployment rate. From analysis result of determination coefficient, the score of 0.334 is acquired which means that the magnitude of variable of inflation rate is influenced by variable of unemployment rate by 33.4% and the rest of 66.6% is influenced by variable ofX_{other} which is not included in this research model. The size of t_{count} valueacquired is at 5.302. Therefore t_{count}value>t_{table} value where 5.302 > 1.980, so there is significant relationship between variable of unemployment rate toward variable of inflation rate. From analysis result it can be explained that there is positive relationship between unemployment rate and inflation rate in the Regency of Timor Tengah Utara, in which any increase on unemployment rate has reciprocal effect toward inflation rate for community in the regency of TTU. There is a trade-off between inflation rate and unemployment rate that is if inflation rate is suppressed, unemployment rate increases; on the contrary, if unemployment rate is suppressed, inflation rate will be faster, whereas both conditions are unpleasant for public. The size of t_{count}value which is greater than t_{table}shows that there is significant relationship which means that the conclusion of this analysis result may be generalized or applicable toward population. Inflation which has developed so fast needs to overcome since it will undermine economic structure and inflation may be overcome rapidly, but accompanied with high unemployment rate and other alternative when inflation may be overcome slowly, but inflation recovery becomes unclear although accompanied with low unemployment rate. Action that can be taken is by reducing amount of money in circulation, both with appeal and also by tax incentive and austerity policy or with mixed from all fiscal and monetary policies.

b) Analysis of the Effect on Inflation Rate toward Unemployment rate in the Regency of Timor Tengah Utara

To find out the effect between variable of inflation rate toward variable of unemployment rate, it may use simple linear regression analysis tools. The magnitude of regression value between variable of inflation rate toward variable of unemployment rate is as follows: score of α = 0.760 explains that if there is no change on variable of inflation rate, then variable value of unemployment rate is 0.760. But if there is any addition on variable of inflation rate by 1 unit, then unemployment rate will decrease by 0.876. The size of coefficient value of variable correlation on inflation rate toward variable of unemployment rate by 0.876 which means that relationship between variable of inflation rate toward variable of unemployment rate has strong relationship. Determination coefficient shows that magnitude variation of variable on unemployment rate is determined by variable of inflation rate. From analysis result of determination coefficient, the value of 0.762 is acquired which means that the magnitude of variable of unemployment rate is influenced by variable of inflation rate by 76.2% and the rest of 24.7% is influenced by variable of X_{other} which is not included in this research model. The size of

t_{count} value acquired is at -1.287. Therefore t_{count}value<t_{table} value where 1.287> 1.980, so there is significant relationship between variable of inflation rate toward variable of unemployment rate in the regency of TTU.

c) Analysis of the Effect on Unemployment Rate toward Economic growth in the Regency of Timor Tengah Utara.

The effect between variable of unemployment rate toward variable of economic growth can be found by using simple linear regression analysis tools. The magnitude of regression value between variable of unemployment rate toward variable of economic growth is as follows: value of α = 0.565 explains that if there is no change on variable of unemployment rate, then variable value of economic growth is 0.565. But if there is any addition on variable of unemployment rate by 1 unit, then economic growth will decrease by 0.201. The size of coefficient value of variable correlation on unemployment rate toward variable of economic growth by 0.680 which means that relationship between variable of unemployment rate toward variable of economic growth has strong relationship. Determination coefficient explains about magnitude variation of variable on economic growth is determined by variable of unemployment rate. From analysis result of determination coefficient, the value of 0.462 is acquired which means that the magnitude of variable of economic growth is influenced by variable of unemployment rate by 46.2% and the rest of 53.8% is influenced by variable ofX_{other} which is not included in this research model. The increase of economic growth due to the effect of unemployment rate decline is expected to manifest in multiple things namely the increasing of people's standard of living leads to welfare and creating job opportunities although population keep increasing. The size of t_{count} value acquired is at 8.412. Therefore t_{count}value>t_{table} value where 8.412> 1.980, so there is significant relationship between variable of unemployment rate toward variable of economic growth in the regency of TTU.

d) Analysis of the Effect on Inflation Rate toward Economic Growth in the Regency of Timor Tengah Utara

The effect between variable of inflation rate toward variable of economic growth can be found by using simple linear regression analysis tools. The magnitude of regression value between variable of inflation rate toward variable of economic growth is as follows: value of α = 0.263 explains that if there is no change on variable of inflation rate, then variable value of economic growth is 0.263. But if there is any addition on variable of inflation rate by 1 unit, then economic growth will decrease by 0.136. The size of coefficient value of variable correlation on inflation rate toward variable of economic growth by 0.795 which means that relationship between variable of inflation rate toward variable of economic growth has very strong relationship. Determination coefficient explains that magnitude variation of variable on economic growth is determined by variable of inflation rate. From analysis result of determination coefficient, the value of 0.632 is acquired which means that the magnitude of variable of economic growth is influenced by variable of inflation rate by 63.2% and the rest of 36.8% is influenced by variable of X_{other} which is not included in this research model. Inflation reflects price stability, the lower inflation rate means the higher propensity to price stability. But inflation issue is not only related to the price increase of goods and services. Inflation also is highly related with purchasing power of the society. Meanwhile people's purchasing power is very dependent to real wage. Inflation actually is not too problematic if price increase is accompanied with the increase of real wage. Wage increase can be influenced by provision of employment or job opportunities. It is established in line with the increase of economic growth in that region.The size of t_{count} value acquired is at 0.136. Therefore t_{count}value<t_{table} value where 0.136 <1.980, so there is no significant relationship between variable of inflation rate toward variable of economic growth in the regency of TTU.

2. Analysis of Multiple Linear Regression

Analysis result of multiple linear regression acquiring linear regression equation as follows:
Based on multiple linear regression model above, so it may be described as:

1) Value of a = 0.025, can be described that if one free variable, namely variable of unemployment rate, variable of inflation rate is assumed constant or fixed,
then economic growth is 0.025. If both free variables experiencing a decline related to various policies in its implementation then economic growth will increase.

2) Value of b_1 = 0.624 explains that if variable of unemployment rate is considered constant or fixed, then inflation rate will increase by 0.624.

3) Value of b_2 = -0.008 can be described that if variable of unemployment rate and inflation rate is considered constant or fixed, then economic growth will decrease by 0.008.

Obtained value of R is at 0.791. It means that relationship between variable of unemployment rate and inflation rate with economic growth in the regency of Timor Tengah Utara has very strong relationship. Determination coefficient explains about contribution of independent variables toward variable of economic growth being noticed. From analysis result of determination coefficient being noticed, the value of 0.625 is obtained which means that the variable magnitude of economic growth is influenced by variables of unemployment rate and inflation rate by 62.5% and the rest 37.5% is influenced by variable of x_{other}which is not included in this research model. The size of F_{count} value being obtained is 6.189 with level of significance. Therefore the value of F_{count}> the value of $F_{table}$where 6.189 > 2.70, so there is significant relationship between variables of unemployment rate and inflation rate toward variable of economic growth in the regency of Timor Tengah Utara.

VI. Conclusion

Based on analysis result and discussion then the conclusion is as follows:

1. Based on analysis result of simple regression which shows the effect between variable of inflation rate toward variable of unemployment rate by 0.876, it shows that this relationship is very strong. From analysis result of determination coefficient it obtains the value of 0.762 which means that variable magnitude of unemployment rate toward inflation rate in the regency of TTU at 76.2% and the rest of 33.8% is affected by variable of X_{other}which is not included in this research model with significance level smaller than alpha (0.5) then there is significant effect between variable of inflation rate toward variable of unemployment rate in the Regency of Timor Tengah Utara. The increase of inflation rate represents economic growth, but in the long term, high inflation rate may present a bad impact. The height of inflation rate leads to the price of domestic goods relatively more expensive compared to the price of imported goods. People is encouraged to buy imported goods which relatively cheaper. The more expensive price leads to the decline of competitive power of domestic goods in international market. It may have an effect on export value which tends to decrease, in contrary value of imported goods tends to rise. The lack of competition of domestic goods and services leads to low demand toward domestic products. Production is reduced. Some businessmen will reduce the production. Less production will cause some workers lose their jobs. Some economists suggested that inflation rate which was too high was initial indication of the worsen economy in one country. High inflation rate may encourage Central Bank to raise interest rate. It leads to contraction or negative growth in real sector. Further impact is unemployment becomes increasingly higher. Therefore, inflation rate and unemployment rate are two parameters which can be used to measure the good and bad of economic health encountered by one country.
2. Based on simple analysis result between variable of unemployment rate toward economic growth is the magnitude of regression coefficient score of 0.680 which means a strong influence. From analysis result of determination coefficient, it obtains value of 0.462 which means that the magnitude of variable of economic growth is influenced by variable of unemployment rate at 46.2% and the rest at 54.8% is influenced by variable of X_{other} which is not included in this research model with significance level smaller than alpha (0.5) so there is significant effect between variable of unemployment rate toward variable of economic growth in the Regency of Timor Tengah Utara.
3. Based on analysis result of inflation rate toward economic growth which represented with the magnitude of regression coefficient value has very strong effect. Inflation rate has negative relationship toward unemployment rate. If inflation rate being viewed is inflation occurred on prices in general, then the height of inflation rate occurred will lead to increase on interest rate (loan). Therefore, with high interest rate will reduce investment to develop productive sectors. It will have an effect on high unemployment rate due to the lack of job opportunities as the result of low on investment which eventually impacting economic growth in Regency of Timor Tengah Utara.
4. Based on multiple analysis result between Unemployment rate and Inflation rate toward economic growth jointly, regression coefficient value by 0.791 which means a very strong influence. Analysis result of determination coefficient being noticed, it obtains value of 0.625 which means that the magnitude of variable of economic growth is influenced by variable of unemployment rate and variable of inflation rate by 62.5% and the rest 37.5% is influenced by variable of X_{other} which is not included in this research model. The result of anova table shows the size of F_{count} being obtained at 6.189. Therefore the value of F_{count}> the value of F_{table} where 6.189 > 2.70, so there is significant effect between variable of unemployment rate and inflation rate simultaneously toward economic growth in the Regency of Timor Tengah Utara.

VII. Suggestion

Based on conclusion above then the writer suggests several important issues namely:

1. The necessity by regional government of Regency of TTU to perform political policy of deficit budgeting that is government policy to make regional expenditure is greater than regional revenue in order to give stimulus on economic growth, so that may create job opportunities which eventually reducing unemployment on TTU community and also may suppress inflation rate.
2. Regional government needs to improve attention to facilities of education services to public. Public education level which in general dominated with high school graduates and under indicates the difficulty of workforce absorption. Actions that can be done for example the improvement of education services, formal education in particular and reducing the number of drop out students. In addition, creating employment as one of

priorities in developing economy and government must consistent in its implementation or achieving the priority by stimulating soft loan to Micro, Small and Medium Enterprises in the regency of TTU.

3. The necessity by regional government of TTU regency to encourage the spirit of entrepreneurship to public in every aspect of life. Contribution from entrepreneurship sector toward economic development in one region may develop and may increase economic growth ideally. Every region is supposed to have entrepreneurs by 2% from population so that traditional consumptive goods can be produced locally. It is because the presence and the role of entrepreneurs will give quite significant effect toward economic development and improvement on economic condition of community (suppressing inflation). It is because entrepreneurship can create employment, increase quality of life of the people, increase income distribution, utilize and mobilize resource to increase national productivity since informal sector is an alternative which may help to absorb unemployment.

4. Entrepreneurship can be an alternative in an effort to alleviate unemployment and also able to suppress inflation rate. Regional government of Regency of TTU is expected to be able to support the progress of entrepreneurship by way of providing capital support so that entrepreneurs can establish business without obstacle regarding capital cost. Job seekers who initially only interest in formal sector also expected to change their views and switch on informal sector namely to make business.

References

[1]. *Ahmad, Irdam*, 2007, *Hubungan Antara Infasi dengan tingkat Pengangguran; Pengujian Kurva Philips dengan Data Indonesia,1976 -2006*, Universitas Pancasila, Jakarta.

[2]. *Badan Pusat Statistik*, 2012.*Data Strtegis BPS 2015*, Badan Pusat Statistik Indonesia, Jakarta. http://www.bps.go.id

[3]. *Endri*, 2008, *Analisis Faktor – Faktor Yang Mempengaruhi Inflasi di Indonesia*, ABFI Institue PERBANAS, Jakarta.

[4]. *Kranti, Perdana*. 2012. Analisis Kaulsalitas Pertumbuhan Ekonomi, Tingkat Inflasi dan Pengangguran Tahun 2006-2010.

[5]. *Latumaerissa, Julius R*, 2011. *Bank dan Lembaga Keuangan Lain*, Salemba Empat, Jakarta.

[6]. *Mankiw, Gregory*, 2008. *Makroekonomi*, Erlangga, Jakarta.

[7]. *Wisda, Primawan*. 2012. Analisis Faktor-Faktor Yang Mempengaruhi Inflasi Di Indonesia Periode 2000-2011, Semarang.

[8]. *Utomo , Fajar Wahyu*. 2013. Pengaruh Inflasi Dan Upah Terhadap Pengangguran Di Indonesia Periode 1980-2010.

[9]. *Nugroho ,Heru*. 2008. Analisi Pengaruh Inflasi, Suku Bunga, Kurs dan Jumlah Uang Yang Beredar Terhadap Indeks LQ45 Periode 2002-2007.

[10]. *Suparmoko*, 1990. *Pengantar Ekonomika Makro*, Fakultas Ekonomi UGM, Yogyakarta.

[11]. *Setyowati, Endang*. 2011. Model Dinamis Pertumbuhan Ekonomi, Inflasi, dan Pengangguran di Indonesia. .

[12]. *Supriatna, T.* 2000. *Strategi Pembangunan dan Kemiskinan*.Jakarta: RinekaCipta.

[13]. *Sukirno, Sadono*, 2008. *Makroekonomi (Teori Pengantar)*,Rajawali Pers, Jakarta.

Emanuel Be Haukilo "Analysis of the Impact of Unemployment and Inflation Rate toward Economic Growth In The Regency of Timor Tengah Utara." IOSR Journal of Economics and Finance (IOSR-JEF) , vol. 9, no. 1, 2018, pp. 46-52.