

The Effect of Labor Absorption on Per Capita Income through the Growth of Indonesian Populations

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Abstract

The global economic downturn caused by the trade war between America and China created uncertainty in the world community, this resulted in decreased activity of Financial Services Institutions and resulted in high government balance of payments. This is due to high foreign capital transactions which resulted in the strengthening of the dollar value. Contrary to the above situation, the Central Bureau of Statistics noted that Indonesia's poor population in March 2019 amounted to 25.14 million. This number decreased by 810 thousand inhabitants over the same period the previous year. Meanwhile, the annual population increase is around 3-4 million people and the income per capita each year increases, but it is not significant to the population growth. Through the phenomena above, I am writing to analyze how the influence of the number of labor force, in this case unemployment and working population, on per capita income through population growth in Indonesia. This research method uses secondary data and time series also uses the path analysis method from 1990-2019. The results obtained from this study are that unemployment and working population have a positive effect on population while unemployment has a negative effect on per capita income and people who work have a positive effect on per capita income. In total population affects unemployment, workers and per capita income. This means that the population as a whole becomes a top priority in determining policies.

Keywords: *unemployment, working population, per capita income, total population*

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I. Introduction

The increase the population which is not accompanied by the availability of adequate employment opportunities has resulted in an increasing number of unemployed. This is due to a lack of employment opportunities. Employment has a very big influence on the people's economy, while the economy is a factor in the occurrence of social inequality. One of the characteristics of the workforce in Indonesia is that the rate of labor growth is higher than the rate of employment growth

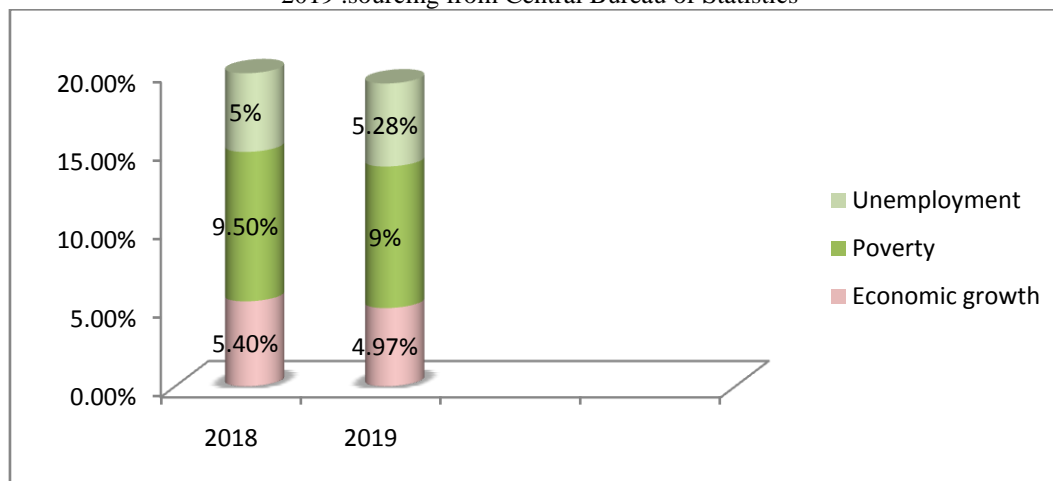
The current situation in Indonesia is that the world is being hit by a global economic problem, namely an economy that is the result of the trade war between America and China. However, according to the Ministry of Finance, the Financial System Stability Committee (KSSK) which consists of the Ministry of Finance (Kemenkeu), Bank Indonesia (BI), the Financial Services Authority (OJK) and the Deposit Insurance Corporation (LPS) said that the stability of the financial system in the fourth quarter of 2019 remains under control and the balance sheet. Indonesia's payments as a whole in 2019 are predicted to record a surplus. The Central Statistics Agency also noted that Indonesia's poor population in March 2019 amounted to 25.14 million people. This figure decreased by 810 thousand inhabitants over the same period the previous year. The Open Unemployment Rate (TPT) in February fell to 5.01 percent or 0.12 percentage points lower than last year. Then the third factor is low inflation 2.48 percent

Economists generally agree that population development can be both a driving force and a hindrance to development. It is seen as a motivating factor because, first, this development allows the increase in the number of workers from time to time. Therefore, at a higher level of development, population growth can provide a greater contribution to the development of economic activity (Sadono Sukirno, 2006).

Table No.1: Shows the number of Indonesian Macroeconomic Data which consists of 2015 to 2019 consisting of total population, per capita income, unemployment and number of people working, sourcing from Central bureau of statistic

Year	The Population (million peoples)	Per capita Income (Rp.million)	Unemployment (million peoples)	Employment (million peoples)
2015	255.5	3.33	7.1	118.2
2016	258.7	3.56	7.5	120.8
2017	261.9	3.83	7	118.4
2018	265	3.89	7	121
2019	268	3.9	6.9	127.1

Table No.2: Shows the number of Unemployment, Poverty and Economic Growth in Indonesia in 2018 and 2019 .sourcing from Central Bureau of Statistics



Based on this background, the author is interesting to examine how the impact of population growth can affect the workforce (both working and non-working) on per capita income in Indonesia.

Research Question

Based on the description on the background of the problem, the researcher makes a formulation, the research can be formulated as follows:

1. Does total unemployment affect per capita income through increasing population?
2. Does the number of people working affect the per capita income by increasing the population?
3. Does total population have a direct effect on income per capita?

Research Purposes

In line with the formulation of the problem, the purpose of this study is

1. To analyze the effect of unemployment on per capita income through population growth?
2. To analyze the effect of the number of people working on per capita income through population growth?
3. To analyze the direct relationship between population growth and per capita income?

II. Material And Methods

Research is defined by many authors as a systematic process. Kerlinger (2006) defines scientific research as a systematic, controlled, empirical and critical investigation of social phenomena guided by theories and hypotheses about conjectures related to social phenomena guided by theories and hypotheses about conjectures related to these phenomena. The following steps are in accordance with the scientific method and complement the general elements of a systematic approach to research:

1. Identification of research problems
2. Review information
3. Data collection
4. Data analysis
5. Draw conclusions

The purpose of this study is to obtain evidence regarding the influence of the labor force on per capita income through population growth in Indonesia. These variables are obtained through theoretical and empirical studies conducted by researchers. Based on these studies, the main problems and research hypotheses are formulated. Before the statistical test was carried out, the samples to be used in the study were determined, the

data sources, and the data collection methods. The results of the analysis are then interpreted to answer the existing problems. The final step of this research is to make a conclusion and research suggestions

Data Source

According to the source, the data used in this study is external secondary data, Data obtained indirectly by intermediaries, such as other people or documents (Sugiyono, 2014). This study uses a quantitative approach, where the approach has been predetermined using secondary data and numerical data. Linking variables in problems and hypotheses. Quantitative data, namely data in the form of numbers or extrapolated qualitative data (Sugiyono, 2014). Secondary data with the type of time series (time series) in the period 1990 - 2019. The data collection method in this research is secondary data collection obtained from the internet, BPS (Central Bureau of Statistics) and library techniques, collecting data from books, journals, and research results as well as reading sources or written material relevant to this paper.

Analysis Methods

This study uses path analysis using SPSS 22.0. To test the effect of intervening variables, multiple path analysis methods are used to estimate the causal relationship between variables (casual model) which has been previously determined based on theory. Path analysis alone cannot determine causal relationships and also cannot be used as a substitute for researchers to see the causal relationship between variables. The causal relationship between variables has been formed with a model based on a theoretical basis. What path analysis can do is determine the pattern of the relationship between three or more variables and cannot be used to confirm or reject the imaginary causality hypothesis (Imam Ghozali: 2011).

The data in this study will be processed using the Statistical Package For Social Sciences (SPSS) 22.0 For Windows program. The amount of direct influence can be determined by multiplying each direct effect coefficient from the research equation (Imam Ghozali: 2011). The standard for determining the hypothesis according to Imam Ghozali (2011) is as follows: The hypothesis can be accepted if the regression results show a significance level below 0.05 (p<0.05)

Path Analysis Methods

Based on the research paradigm and hypothesis that has been presented in the previous chapter, the data analysis method used to test the hypothesis is Path Analysis. The reason for using path analysis is because this method can analyze the pattern of causal relationships between variables in order to determine the direct and indirect effect, simultaneously or together and partially or independently of several causal variables on an effect variable.

Path analysis is part of a regression model that can be used to analyze the causal relationship between one variable and another. In path analysis, the independent and dependent effects can be in the form of direct and indirect effects, or in other words, path analysis takes into account the direct and indirect effects. The indirect effect of an independent variable on the dependent variable is through another variable called the intervening variable. To describe the causality relationships between variables to be examined in this study, a path diagram is used.

The path diagram is a tool to graphically depict the structure of the causality relationship between the independent, intervening (intermediary) and dependent variables. Based on the research paradigm developed in accordance with the theoretical framework.

The path diagram contains two exogenous variables, are unemployment and working people, two endogenous variables (per capita income and The population) and two residual variables ϵ . From the hypothesis, formulated into a mathematical equation will get a model

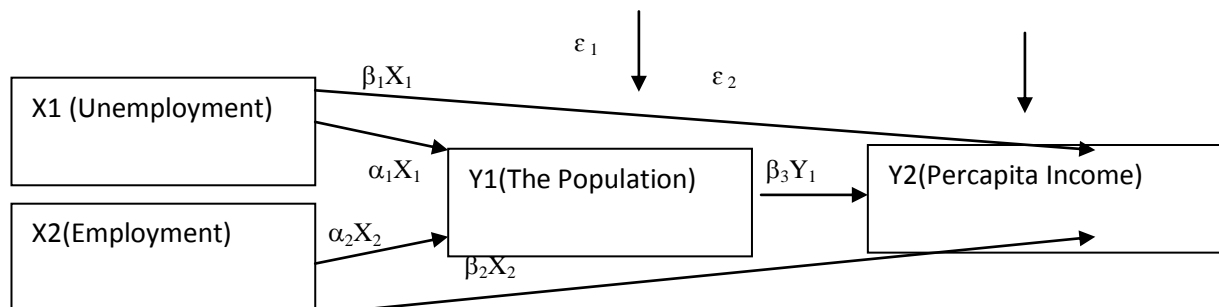


Figure no 1 : Concep Farming

From the Concep Farming created 2 models are :

$$Y_1 = \alpha_1 X_1 + \alpha_2 X_2 + \varepsilon_1$$

$$Y_2 = \beta_1 X_1 + \beta_2 X_2 + \beta_3 Y_1 + \varepsilon_2$$

Noted :

Y= Variabel endogenous

X= Variabel exogenous

ε = Standar error

III. Result

Table no 3 :Show of the result from the research.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-144.083	5.928		-24.305	.000		
1 X ₁ _Unemployment	-.825	.181	-.076	-4.552	.000	.619	1.614
X ₂ _Employment	.209	.152	.154	1.375	.178	.014	73.232
Y ₁ _The Population	.667	.091	.801	7.349	.000	.014	69.269

$$Y_1 = 0.046 + 1.018 + \varepsilon_1$$

$$Y_2 = -0.76 + 0.154 + 0.801 + \varepsilon_2$$

Direct Effect

Model	Coefisient	t value	Signifikan
X ₁ → Y ₁	0.046	0.073	TS
X ₂ → Y ₁	1.018	0.000	S
X ₁ → Y ₂	-0.76	0.000	S
X ₂ → Y ₂	0.154	0.178	TS
Y ₁ → Y ₂	0.801	0.000	S

Indirect Effect

Model	Coefisien	t value	Signifikan
X ₁ → Y ₁ → Y ₂	0.046 x 0.801 = 0.037	0.073 x 0.000 = 0.000	S
X ₂ → Y ₁ → Y ₂	1.018 x 0.801 = 0.815	0.000 x 0.000 = 0.000	S

$$\text{Total Effect} = 0.037 + 0.815 = 0.852$$

Interpretation

Direct Effect

X₁- Y₁ = Unemployment has a positive effect on population but not significant. This means that if the population increases by one million people, unemployment will increase by 46,000 people. Increasing it just a little doesn't really matter

X₂ - Y₁ = Labor or people who work have a positive and significant effect on the population. This means that if the population increases by one million people, the people who work will also increase by one million and eighteen people.

X₁ - Y₂ = unemployment has a negative and significant effect on income per capita. This means that if the unemployment increases by one million, the income per capita will also decrease by 760 thousand rupiah

X₂ - Y₂ = Labor has a positive and insignificant effect on income per capita. This means that if the workforce increases by one million people, then the income per capita will increase by 154 thousand rupiah. Not very impactful because the increase is only a little.

Y₁ - Y₂ = population has a positive and significant effect on income per capita. This means that if the population increases by one million rupiah, the income per capita will increase by 801 thousand rupiah.

Indirect Effect

X1 - Y1 - Y2 = unemployment has a positive and significant effect on per capita income through total population. This means that through the total population, the relationship between unemployment has an impact on income per capita, which means that the population plays a role in increasing income and unemployment

X2 - Y1 - Y2 = Work force or people who work have a significant effect on per capita income and through total population. This means that the population becomes an intermediary who is very influential in increasing the people who work and increasing the income per capita

Total Effect

Overall unemployment relationship, people who work have a significant effect on per capita income through total population. This means that the population plays a very important role in increasing unemployment, working people and income per capita

IV. Discussion

Theory

1. This per capita income is a measure of the welfare of an area. Regions that have a high income value are not necessarily more prosperous than low-income regions because the population determines the level of welfare of the area.
2. Okun's Law explains that if there is an increase in GRDP in an area, the absorption of labor in that area will also increase which has an impact on decreasing the number of unemployed
3. Weeks,(1992) states that due to the high population growth, there will be competition among the population to survive. In winning the competition each person tries to improve education and skills, and take a particular specialization
4. The number of people working depends on the amount of demand (demand) and jobs available in the community. Demand for labor is influenced by economic activity and the level of wages. The amount of placement (number of people working or the level of employment) is influenced by the power of supply and demand, while the amount of supply and demand for labor is influenced by the level of wages (Nainggolan, 2009).

Previous Research

1. Trianggono Budi Hartanto, SitiUmajahMasjkuri (2014), Analysis of the Influence of Population, Education, Minimum Wages and Gross Domestic Product (GRDP) on Total Unemployment in Regencies and Cities of East Java Province in 2010-2014. Stating that the variables of population, education and GRDP have a positive and significant effect on the number of unemployed in the districts and cities of East Java Province in 2010-2014
2. (Irhamni, 2018) The Effect of Population, Unemployment, and Government Expenditures on Poverty in Indonesia in 1986-2015. The results showed that: (1) The population variable has a positive and significant effect on poverty in the long term. (2) The unemployment variable has a positive and significant effect on poverty in the long run. (3) Government expenditure variable has a negative and significant effect on poverty of -0.299375 in the long run. (4) Population, unemployment, and government expenditure variables simultaneously affect poverty in the long run..
3. NurulFadlillah, Sukiman and Agustin SusyatnaDewi (2014) Analysis of the Effect of Per Capita Income, Unemployment Rate, HDI and Population Growth on poverty in Central Java in 2009-2013. Based on the results of research on the factors that influence poverty in 29 districts in Central Java for the period 2009-2013, it can be concluded as follows: 1. If per capita income increases, the number of poor people will decrease. 2. If the open unemployment rate increases, the number of poor people will also increase. 3. If the human development index increases, the number of poor people will decrease. 4. If population growth increases, the number of poor people will increase, but the increase is not significant (the effect is not too large). 5. The per capita income variable has the largest coefficient, so the variable per capita income is the variable with the greatest elasticity (which affects the number of poor people the most compared to the other three variables)
4. Anindita, Ardi, Utami, Maslihatin (2017) The Impact of Economic Growth, Number of Unemployment and Community Welfare on Poverty Levels in Sidoarjo Regency This paper aims to determine the relationship between economic growth, the number of unemployed and community welfare on the welfare of the people in Sidoarjo Regency. that economic growth has a very strong relationship and contributes to poverty levels. The number of unemployed also has a very strong relationship and contributes to the level of poverty. Furthermore, community welfare has a strong level of relationship and contributes to the level of poverty in Sidoarjo Regency. Sidoarjo Regency Government thus needs to formulate a policy in an effort to increase employment opportunities for the community. It is hoped that the poverty rate in Sidoarjo Regency can continue to be reduced (Anindita&Utami, 2017)

Hypothesis

Based on the theory and previous research, it can be concluded that the hypothesis of these variables is as follows:

1. Unemployment is positively related to population
2. Labor has a positive relationship with the population
3. Total population is positively related to income per capita
4. Unemployment is negatively related to per capita income
5. Labor is positively related to income per capita

Findings

This paper finds that in total and overall unemployment relationship, people who work have a significant effect on per capita income through total population. This means that the population plays a very important role in increasing unemployment, working people and income per capita. This means that the results of this paper are based on previous theory and research

V. Conclusion

1. Directly the people who work have a positive and significant effect on the population. This means that the number of quality residents will increase the working people
2. Directly unemployment has a negative effect on capita income. Unemployment will reduce state income.
3. Directly total population affects capita income. to create a healthy and prosperous society, high income is needed in order to create a prosperous society. And the country can be said to be worthy and prosperous

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