

## **Minimum wage analysis, inflation and the effect of the unemployment and purchasing power within the ex Besuki Residency**

**Dra. SUNARSIH, MP**

*High School Economic Science Of “(STIE)Mandala” Jember, East Java - Indonesia*

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**Abstract:** *In 2015 East Java has the highest poor population of 4.79 million people (12.34 percent) in Indonesia, while the poverty bag is in the eastern part of East Java. The area is known as Ex Besuki Residency including Jember, Bondowoso, Situbondo, Banyuwangi.*

*The objectives of the study are: 1. To test and analyze the effect of District Minimum Wages, inflation either individually or individually on unemployment within the Ex Besuki Residency. 2. To test and analyze the effect of District Minimum Wages, inflation either individually or individually on the purchasing power of the people within the Ex Besuki Residency. 3. To test and analyze the theoretical significance of A.W. Phillips (1958) on inflation and unemployment within the Ex Besuki Residency. Data were analyzed using regression and Processing with SPSS 22.0 under windows. Results: In Ex Residency Besuki Philip's theory is not applicable, because minimum wage and inflation do not affect unemployment and have a positive relationship, but each has a significant effect on people's purchasing power.*

**Key Words:** *Inflation, Unemployment, Minimum Wage,*

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### **I. INTRODUCTION**

East Java has the highest poor population of 4.79 million people (12.34 percent) in Indonesia, while the poverty bag is in the eastern part of East Java. The area is known as Besuki Residency including Jember, Bondowoso, Situbondo, Banyuwangi. Jember district has the poorest population of 237,700 poor households, Banyuwangi index of poverty depth of 0.25, Situbondo 0.76, Bondowoso 0.60 (BPS, 2015).

A.W. Phillips (1958) states the existence of a stable structural relationship between wages, inflation and unemployment in Britain. The inflation theory has found a close relationship between the unemployment rate and the rate of change in nominal wages. Macroeconomic policy indicators are low inflation and low unemployment. The Phillips curve shows there is an inverse relationship between inflation and unemployment, if inflation is high, then unemployment will be low and vice versa. The minimum wage in the Besuki Residency in 2011-2013 has increased. The highest increase occurred in 2011-2012 ie the average increase in district minimum wage of approximately Rp. 241.000, 00. While the average minimum wage of 2015 is already above the figure of Rp 1,200,000.00 This means that an employee must earn minimum wage as remuneration of the labor force factor given to produce goods and services per month above Rp. 1,200,000 every month. Problem formulation is: 1. What is District Minimum Wage, inflation together or individually affect unemployment within ex Besuki residency? 2. Does the District Minimum Wage, inflation together or individually affect the purchasing power of the community within the Ex Besuki Residency?

3. What is the theory of A.W. Phillips (1958) on inflation and unemployment has a significant negative relationship at the Ex Besuki Residency?

The objectives of the study are: 1. To test and analyze the effect of District Minimum Wages, inflation either individually or individually on unemployment in the Ex Besuki Residency. 2. To test and analyze the effect of District Minimum Wages, inflation either individually or individually on the purchasing power of the people in the Eks Besuki Residency. 3. To test and analyze the theoretical significance of A.W. Phillips (1958) on inflation and unemployment at the eks Besuki Residency.

### **II. LITERATURE REVIEW**

The Phillips Curve in its modern form states that the inflation rate depends on three forces, namely: expected inflation, unemployment deviation from the natural rate (cyclical unemployment), and supply shock. The modern form of the Phillips curve tends to adapt to the economic developments, such as the awareness of the importance of expectations on aggregate supply, the linkage between price inflation and wage inflation, and the importance of taking into account the shocks to aggregate supply (Mankiw, 2007: 229). A low unemployment rate will push upward inflation due to pressure from aggregate demand as demand pull inflation. In addition,

inflation is also caused by supply-side shocks, such as price increases in production inputs, thereby increasing production costs and increasing the price of goods (cost push inflation). In this context, the assumption of markup pricing at which the prices of goods is determined by the firm on the basis of labor costs, so that the price increases along with the higher wage rates.

An empirical study of the theory of A.W. Phillips (1958) which states the existence of a stable structural relationship between wages, inflation and unemployment in the UK. This will be done at Besuki Residency to be able to prove the significance of the theory, as research has been conducted in some countries, that there is a positive relationship between inflation on unemployment (Haug and King, 2011; Berensten, Menzio and Wright, 2009; Beyer and Farmer, 2007). The empirical result of minimum wage relationship with unemployment concluded that minimum wage has negative relation to labor demand, meaning that the increase of minimum wage will reduce the amount of labor demand so that the amount of labor absorption is also reduced (Magruder, 2013; Sulistiowati, 2012). The unemployment rate is influenced by the wage rate factor (Mankiw, 2011: 21), whereas the increase in wage purposes improves the living standard of the worker, further increases the purchasing power of the people, which ultimately increases the demand for goods and services that can increase the rate of inflation. The impact of minimum wages on unemployment, has a significant positive impact on unemployment (Huang, Loungani, Wang, 2014) ., This means that for every minimum wage increase results in an increase in the number of unemployed. Other results suggest that minimum wage laws have no significant relationship to unemployment (Bhorat, Kanbur and Mayet, 2012; Dinkelman and Ranchhod, 2010; Hertz, 2005).

The change and addition of the type of needs and the addition of the type of Decent Living Needs (KHL) which originally only 46 species into 60 KHL types.

The definition of unemployment in this study is: Those who are jobless and looking for a job, the unemployed and preparing the business, the unemployed and unemployed, find it impossible to find a job, those who already have a job but not yet Start work (BPS Jatim, 2016). Minimum Wage (X1) and inflation (X2) as variable dependent, while Open Unemployment rate (as independent variable) (Y1). The purchasing power index (Y2) shows the purchasing power of the people, therefore the higher the purchasing power index the higher the purchasing power per capita of the population. The purchasing power index of a society is a comparison between the difference in the value of a decent standard of living per capita with its minimum value and the difference between the maximum and minimum values of decent living standards per capita consumption. The time period used for ten years is from 2005 to 2014.

### III. RESEARCH METHOD AND HISTOGRAM

To analyze the hypothesis is done by multiple regression analysis:

$$Y1 = a + b1 X1 + b2 X2 + e$$

Information :

Y1 = Unemployment

X1 = Minimum Wage

X2 = Inflation

a, b<sub>1</sub>, b<sub>2</sub> = Constant number (constant) coefficient variable

e : error

$$Y_2 = a + b_1 X_1 + b_2 X_2 + e$$

Information :

Y2 = purchasing power

X1 = Minimum Wage

X2 = Inflation

A, b<sub>1</sub>, b<sub>2</sub> = constant numbers (constants) of variable coefficients

E: error intruders

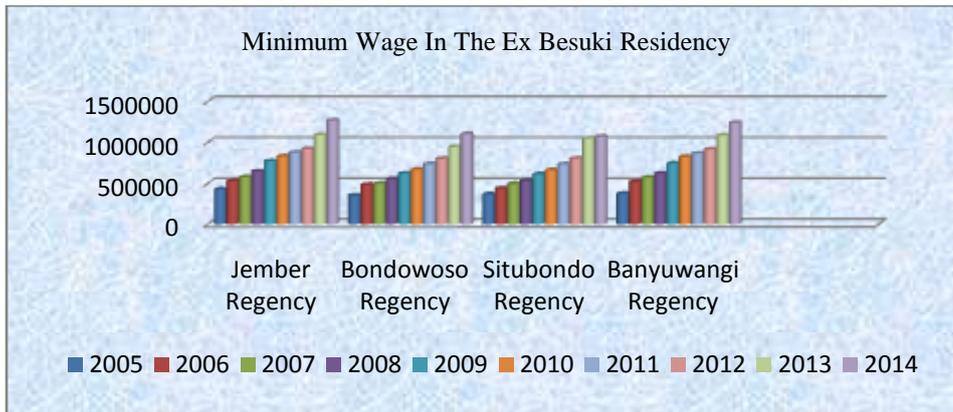
The hypothesis model is consecutively described as follows:

1. Y1 = F (X1; X2), meaning UMK, inflation together or individually affect unemployment.

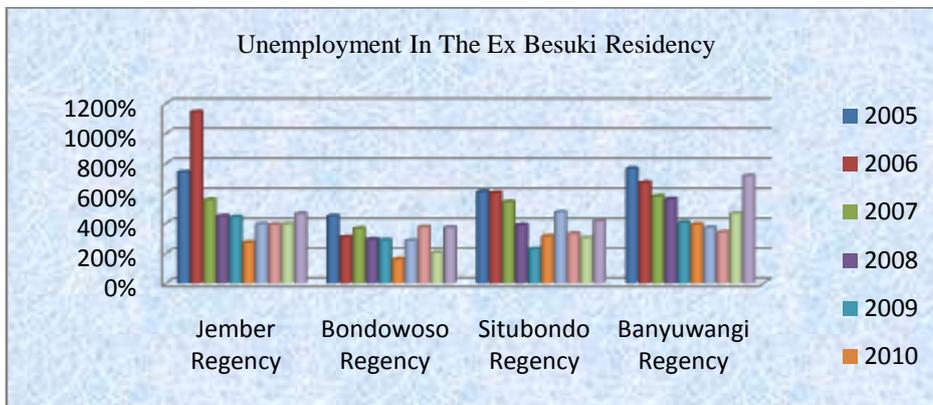
2. Y2 = F (X1; X2), meaning UMK, inflation together or individually affect the purchasing power of society.

This research was conducted in years 2017 in 4 (four) districts within the Ex Karesidenan Besuki East Java, namely: Jember, Bondowoso, Situbondo and Banyuwangi. This research is an explanatory research, that is research to test and explain the influence of District Minimum Wage, inflation on unemployment and people purchasing power within the Ex Besuki Residency. To achieve the objectives of this study, the first step that can be done is to study and study in depth the literature and research results that serve as a basis to support the problem in this research. Empirical studies are used as supporters who can provide references to solve problems in this study. The results will be used as a research base.

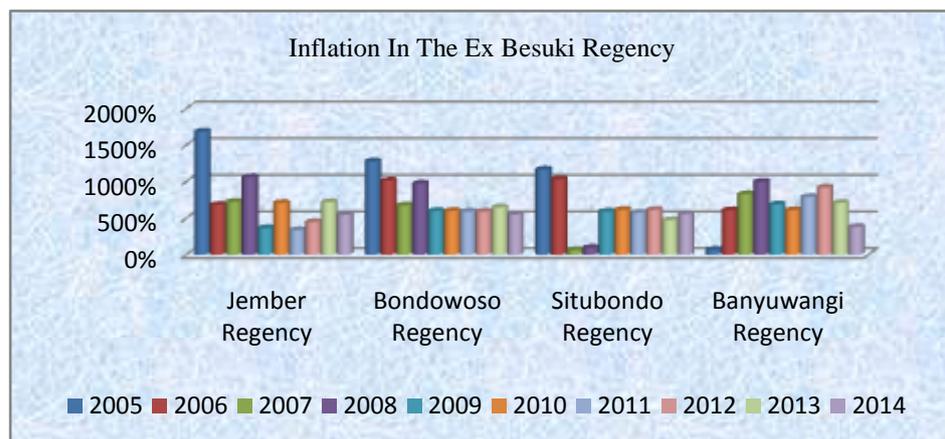
**Histogram**



**Figure1: Minimum Wage In The Ex Besuki Residency**



**Figure2: Unemployment In The Ex Besuki Residency**



**Figure 3: Inflation In The Ex Besuki Residency**

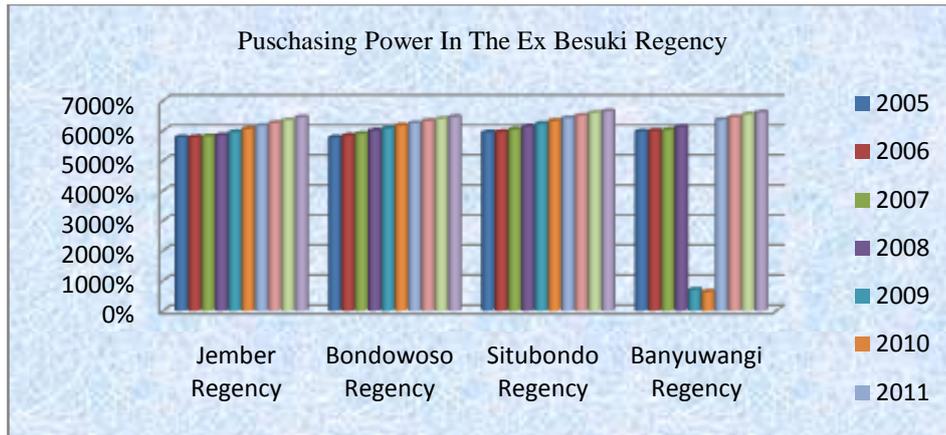


Figure 4: Purchasing Power In The Ex Besuki Residency

IV.RESULT

Table 1

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	521,107	182,577		2,854	,007	151,171	891,043
	X1	,000	,000	-,227	-1,176	,247	,000	,000
	X2	6,522	13,330	,095	,489	,628	-20,487	33,531

a. Dependent Variable: Y1  
Source : Data Processing with SPSS 22.0 under windows

Table 2

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	112970,393	2	56485,196	1,730	,191 <sup>b</sup>
	Residual	1208261,582	37	32655,718		
	Total	1321231,975	39			

a. Dependent Variable: Y1  
b. Predictors: (Constant), X2, X1  
Source : Data Processing with SPSS 22.0 under windows

Table 1.1 Coefficients variable Y1, X1, X2 Explains that the multiple regression equation as follows:

$$Y_1 = a + b_1 X_1 + b_2 X_2 + e = 521.107 + 0,00 X_1 + 6.522 X_2$$

Information :  
Y1 = Unemployment  
X1 = Minimum Wage

X2 = Inflation

The constant of 521,107 states that if there is no increase in the value of the minimum wage variable (X1) and inflation (X2) then the amount of unemployment is 521.107. The regression coefficient of each variable minimum wage magnitude + 0.00 and inflation 6,522 means that each addition of one score of minimum wage and inflation will increase the number of unemployed.

In Table 2 ANOVA variables Y1, X1 and X2 regarding Test F is to test: the significance of constants, variable dependent (unemployment), and public purchasing power. Multiple regression coefficient test criteria of minimum wage and inflation variable on unemployment as follows:

Ha: minimum wage and inflation affect simultaneously and significantly to unemployment;

Ho: minimum wage and inflation have no effect simultaneously and significant on unemployment.

To know the significance of regression is to compare between probability value 0,05 with probability value Sig. In table 2 ANOVA sig value. 0.191 or greater than the probability value of 0.05 or (0.191 > 0.05). So Ho is accepted and Ha is rejected, meaning multiple regression coefficient is not significant, so minimum wage and inflation do not influence simultaneously and significant to unemployment.

Table 3

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	317,313	1006,012		,315	,754	-1721,061	2355,687
	X1	-2,520E-5	,001	-,006	-,032	,975	-,002	,002
	X2	-11,432	73,449	-,031	-,156	,877	-160,254	137,389

a. Dependent Variable: Y2

Source : Data Processing with SPSS 22.0 under windows

Table 3. Coefficients variable Y2, X1, X2 Explains that the multiple regression equation as follows:

$$Y_2 = a + b_1 X_1 + b_2 X_2 + e = 317.313 - 2.520 X_1 - 11.432 X_2$$

Information :

Y2 = Purchasing Power

X1 = Minimum Wage

X2 = Inflation

The constant of 317.313 states that if there is no increase in the value of the minimum wage variable (X1) and inflation (X2) then the purchasing power of the public is 52,529. The regression coefficients of each variable minimum wage -2.520 and inflation -11.432 mean that each addition of one score of minimum wage and inflation will reduce the number of unemployed, and vice versa.

Table 4

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29187,378	2	14593,689	,015	,985 <sup>b</sup>
	Residual	36683904,235	37	991456,871		
	Total	36713091,613	39			

a. Dependent Variable: Y2

b. Predictors: (Constant), X2, X1

Source : Data Processing with SPSS 22.0 under windows

In Table 4 ANOVA variables Y2, X1 and X2 regarding Test F is to test the significance of constants, variable dependent (purchasing power). Criteria of regression coefficient test of the variable minimum wage and inflation on public purchasing power as follows:

□ If the probability value of Sig is greater than or equal to probability value 0.05 or (Sig > 0.05), then Ho is accepted and Ha is rejected which means not significant.

□ If the probability value of Sig is smaller or equal to probability value 0.05 or (Sig < 0.05), then Ho is rejected and Ha is accepted which means significant.

Ha: minimum wage and inflation affect simultaneously and significantly to public purchasing power;

Ho : Minimum wage and inflation have no effect simultaneously and significantly to public purchasing power.

To know the significance of regression of minimum wage and inflation influence simultaneously and significant to society purchasing power is by compare between probability value 0,05 with probability value Sig. In table 4 ANOVA sig value. 0.985 or greater than probability value 0.05 or (0.985 > 0.05). So Ho is rejected and Ha accepted, meaning multiple regression coefficient is not significant, so minimum wage and inflation do not influence simultaneously and signifikan to public purchasing power.

Partially influence of minimum wage and inflation to purchasing power of society can be seen from the value of t. The t values for the minimum wage and inflation are respectively - 0.032 and -0.156. So the minimum wage effect on public purchasing power and inflation affect the purchasing power of society.

## V. CONCLUSION AND RECOMENDATION

### Conclusion

In Ex Besuki Residency, minimum wages and inflation partially or collectively do not have an effect simultaneously and significantly on unemployment. So Philip's theory does not apply within the Ex Besuki Residency. Minimum wage significantly affects people's purchasing power, and inflation significantly affects people's purchasing power.

### Recomendation

It is expected that local governments pay attention to the welfare of their people, especially the issue of policy must be sided with the community. Maintaining price stability so that the real income of labor does not decrease, because it is uselessly wage increases if the price of basic commodities rises steadily.

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