

THE EFFECTS OF INFLATION AND ECONOMIC GROWTH AGAINST THE PROVINCIAL MINIMUM WAGE IN WEST SUMATRA

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Abstract

The aim of this research is to examine the extent of the influence of the variables of Inflation and Economic Growth on the Provincial Minimum Wage variable in West Sumatra within the time range of 1996-2021, with a partially and simultaneously. The method used in this study is quantitative. The data source used is secondary data obtained from the Central Statistics Agency (Badan Pusat Statistik or BPS) in West Sumatra. Multiple linear regression is used as the statistical analysis with SPSS version 26 as the tool for processing the multiple regression. The research results show that partially inflation has a significant influence on the Provincial Minimum Wage resulting in a significant value of $0.000 < 0.05$. Next, Economic Growth partially has a significant influence on the Provincial Minimum Wage with a significant value of $0.009 < 0.05$. Furthermore, Inflation and Economic Growth together, or simultaneously, have a significant influence on the Provincial Minimum Wage in West Sumatra with a significant value of $0.001 < 0.05$. The coefficient test results indicate that the variables under study resulted in an Adjusted R Square value of 0.218. This means that inflation and economic growth can explain 21.8% of the variations that occur in the dependent variable.

Keywords: *Inflation, Effects of Economic Growth, and Provincial Minimum Wage Setting*

INTRODUCTION

As a regulator, the government establishes a minimum wage policy to ensure that workers and their families have a decent standard of living, increase purchasing power, and increase productivity. The minimum wage policy has the intention of giving impetus to economic growth and expanding employment opportunities. Therefore, if there is no regulation carried out by the government, it is feared that wages as labor income will decline in the future level adequate to meet the needs of workers and their families.

The minimum wage is enforced once a year no later than 60 days before falling on January 1 as the date of entry into force of the minimum wage referred to by the Wage Council which is applied by the Governor. The enactment of this minimum wage is used as a safety net so that workers' wages do not decline to a very low level due to labor market imbalances and companies that set wages arbitrarily.

Inflation often causes an increase in the price of goods which makes the increase in labor wages not in line with the increase in inflation, this can cause workers to demand an increase in the minimum wage every year due to economic conditions which are often problematic every year.

Based on the data obtained, the provincial minimum wage in West Sumatra for 1996-2021 has increased continuously over the last 26 years, so this is in line with the objective of determining the minimum wage which is used as additional protection for workers so that the wages provided can meet needs.

In the inflation table in West Sumatra for 1996-2021, it can be seen in 1996 semester 2 where inflation fell by -0.97% while the provincial minimum wage continued to increase by Rp. 54,938. Then in 1996 semester 2 inflation also fell by -5.30% while the provincial minimum wage continued to increase by Rp. 83,938. Then in 2006 semester 1 inflation fell by 9.75% while the provincial minimum wage increased by Rp. 313,438. Next in 2009 semester 1 inflation fell by 2.66% while the provincial minimum wage rose by 431,250. Then in 2015

semester 1 inflation also decreased by 1.92% while the minimum wage increased by Rp. 788,080. From this statement, the development of inflation is not in line or not in accordance with the provincial minimum wage which does not show a positive relationship.

In the table for economic growth in West Sumatra for 1996-2021, it can be seen that in semester 2 of 1997 economic growth fell by 3.31% while the provincial minimum wage continued to increase by Rp. 61,313. Then in 1998 semester 1 economic growth fell by -6.34% while the provincial minimum wage continued to increase by Rp. 65,938. Then economic growth in semester 1 of 2001 fell by 3.55% while the provincial minimum wage continued to increase by 113,438. Then in 2009 semester 1 economic growth decreased by 4.40% while the provincial minimum wage increased by Rp. 431,250. Furthermore, economic growth decreased by -1.40% while the provincial minimum wage increased by Rp. 1,229,845.

METHOD

Quantitative research is used in this research method. The data source used is in the form of secondary data obtained at the Central Bureau of Statistics (BPS) of West Sumatra Province. Statistical analysis was used in this study by determining the dependent variables and independent variables statistically.

RESULTS AND DISCUSSION

1. Normality test

This test intends to see whether the values in the residuals follow a normal/abnormal distribution. If the significance is greater than 0.05 then it is said to be normally distributed. The one sample Kolmogorov Smirnov test was used in this study, which was processed using the SPSS 26 tool:

Table 1. Normality Test Results

		Unstandardized Residuals
N		52
Normal Parameters, b	Means	.0000000
	std. Deviation	335531.94073287
Most Extreme Differences	absolute	.080
	Positive	.077
	Negative	-.080
Test Statistics		.080
asympt. Sig. (2-tailed)		.200c,d
a. Test distribution is Normal.		

The results obtained on the Kolmogorov Smirnov test obtained a significant value of $0.200 > 0.05$, this means that the data indicated a normal distribution.

2. Linearity Test

The purpose of this test is to see whether the variables used have a linear relationship or not. If the significance is greater than 0.05 then the variable has a linear relationship. By looking at Deviation from Linearity, which is processed through the SPSS 26 tool:

Table 2. Linearity Test Results

ANOVA Table						
			Sum of Squares	df	MeanSquare	F
Provincial Minimum Wage * Inflation	Between Groups	(Combined)	7640876429 534.001	50	1528175285 90.680	26,183
		Linearity	1035395309 977770	1	1035395309 977770	177,399
		Deviation from Linearity	6605481119 556.230	49	1348057371 33.801	23,097
	Within Groups		5836536882 000	1	5836536882 000	

	Total	7646712966 416.001	51			
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The results obtained by looking at the Deviation from Linearity obtained a significant value of $0.164 > 0.05$, this means that the data indicated a linear relationship between the Inflation variable and the Provincial Minimum Wage variable.

Table 3. Linearity Test Results

ANOVA Table							
			Sum of Squares	df	MeanSquare	F	Sig.
Provincial Minimum Wage * Economic Growth	Between Groups	(Combined)	72728154086 81.497	49	14842480425 8.806	.794	.707
		Linearity	86481112553 5	1	86481112553 5	.005	.952
		Deviation from Linearity	72719505975 55.962	48	15149897078 2.416	.810	.700
	Within Groups		37389755773 4500	2	18694877886 7.250		
	Total		76467129664 15.997	51			

The results obtained by looking at the Deviation from Linearity obtained a significant value of $0.700 > 0.05$, this means that the data indicated a linear relationship between the Economic Growth variable and the Provincial Minimum Wage variable.

3. Classic assumption test

The classic assumption test used consists of an autocorrelation test, a multicollinearity test, and a heteroscedasticity test. This test was carried out in order to understand the feasibility of using the regression model in this study. The resulting tests include:

4. Autocorrelation Test

This test intends to see whether there is a correlation between the interfering errors in the previous time span. A good result must of course be free from autocorrelation, if that happens then it can be categorized as a problematic regression because it has autocorrelation. In quantitative research, usually the autocorrelation test used is the Durbin Watson test with an assessment that there is no autocorrelation if $dU < DW < 4 - dU$ which is processed using SPSS 26.

Table 4. Autocorrelation Test Results

Summary modelb					
Model	R	R Square	Adjusted R Square	std. Error of the Estimate	Durbin-Watson
1	.499a	.249	.218	342311.049	2.205

The results obtained are known if the results of the autocorrelation test using the DW obtained are 2.205, so they can be described as follows:

dL: 1.474 4-dL: 2.526

dU: 1.633 4-dU: 2.367

The results obtained were $1.633 < 2.205 < 2.367$, it can be concluded that there is no autocorrelation.

5. Multicollinearity Test

This test aims whether the independent variables have a high, perfect, or no correlation. It is said to be good if there is no correlation between the dependent variable and the independent variable. To identify the occurrence of a high association with the independent variables, you can use the Tolerance and Variance Inflation Factor (VIF) method with the following test conditions:

- VIF > 10 Tolerance < 0.10 multicollinearity occurs.

- b. $VIF < 10$ Tolerance > 0.10 does not occur multicollinearity.

Table 5. Multicollinearity Test Results

Coefficientsa				
Model		Collinearity Statistics		
		tolerance	VIF	
1	Inflation	.522	1915	
	Economic growth	.522	1915	

The results obtained that the multicollinearity test was processed with SPSS 26 on Tolerance and VIF obtained that inflation and economic growth together produced a Tolerance of $0.522 > 0.10$ and inflation and economic growth together had a VIF value of $1.951 < 10$. It can be said that there is no multicollinearity.

6. Heteroscedasticity Test

This test intends to test whether there is no similarity of variance and residuals from review to other reviews in the regression model. The absence of heteroscedasticity can be categorized as having a good regression model. Sig testing criteria. > 0.05 does not occur heteroscedasticity and sig. < 0.05 there is heteroscedasticity. The results obtained include:

Table 6. Heteroscedasticity Test Results

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	.968	.205		4,722	.000
	Inflation	-.011	.006	-.347	-1,817	.075
	Economic growth	-.032	.032	-.191	-1,000	.322

The results of the heteroscedasticity test using the Glejser test obtained inflation of $0.075 > 0.05$ while for economic growth a significant value was obtained of $0.322 > 0.05$. This means that there is no heteroscedasticity.

7. Multiple Linear Regression Test

This test is used to analyze and see whether or not there is a partial or simultaneous relationship between the associated variables, in which the regression test using SPSS 26 produces:

Table 7. Multiple Linear Regression Test Results

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	945347.145	139366.548		6,783	.000
	Inflation	16149776	4006.205	.691	4,031	.000
	Economic growth	59888021	21983.061	.467	2,724	.009

Based on the results of the multiple linear regression above, the multiple linear regression equation is obtained as follows:

$$Y = 945347.145 + 16149.776X_1 + 59888.021X_2$$

Multiple linear equations are obtained as follows:

- The constant value of 945347.145 shows that if (inflation and economic growth) is equal to zero, then the estimated value obtained for the minimum wage in West Sumatra Province will increase by Rp. 945347,145.
- The regression coefficient value for inflation is 16149.776, meaning that if inflation increases (eg 1%), the Provincial Minimum Wage tends to increase by Rp. 16149,776.

Inflation has sig. 0.000 < 0.05 so that inflation has a significant effect on the Provincial Minimum Wage.

- c. The resulting value for economic growth is 59888.021 explaining that if economic growth increases by one unit (eg an increase of 1%), then the provincial minimum wage tends to increase by Rp. 59888,021. It can also be seen that economic growth has a sig. 0.009 < 0.05 is significant, so economic growth has a significant effect on the provincial minimum wage.

8. t test

This test is used to observe the dependent variable describing the dependent independent so that it can measure how far the influence is. With the following test conditions:

- Significant > 0.05 partially has no effect.
- Significant < 0.05 is partially influential.

Which is where this test has results:

Table 8. Test Results t

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	945347.145	139366.548		6,783	.000
	Inflation	16149776	4006.205	.691	4,031	.000
	Economic growth	59888021	21983.061	.467	2,724	.009

Testing can be seen that:

- Links of Inflation to Provincial Minimum Wage. Inflation is significant at 0.000 < 0.05, meaning that inflation has a significant effect on the provincial minimum wage. With the hypothesis H₀ is rejected and H_a is accepted.
- The Linkage of Economic Growth to the Provincial Minimum Wage Economic growth is significant by 0.009 > 0.05, meaning that economic growth has a significant effect on the provincial minimum wage. With the hypothesis H₀ is rejected and H_a is accepted.

9. F test

This test is used to see how much the related variables are tested simultaneously, in this test the regression results of the significance test occur as a whole, which has the following testing criteria:

- There is a simultaneous influence of sig. of < 0.05.
- Does not experience the effect simultaneously if the value is sig. of > 0.05.

This test has the following results:

Table 9. F Test Results

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1905047120565.860	2	952523560282.930	8,129	.001b
	residual	5741665845850.141	49	117176853996.942		
	Total	7646712966416.001	51			

In the test results obtained sig. 0.001 < 0.05. This means that inflation and economic growth have a simultaneous effect on the provincial minimum wage.

10. Determination Coefficient Test (R²)

This test is used to see how much and how far the dependent variable can be explained by the dependent variable. The R2 value can describe the regression model in guessing the dependent variable:

Table 10. Test Results for the Coefficient of Determination (R2)

Summary models				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.499a	.249	.218	342311.049

The results above show the value obtained in the Adjusted R Square value of 0.218. This means that the dependent variable is able to explain the independent variable at 21.8%, categorized as weak and limited. Then the remaining 78.2% is influenced by other variables.

DISCUSSION

a. Effect of Inflation on Provincial Minimum Wage

The coefficient value obtained for the inflation variable is 16149.776, if inflation increases (eg 1%), the Provincial Minimum Wage tends to increase by Rp. 16149,776. In the variable results it is explained that inflation has a significant effect because tcount is $4.031 > t_{table}$ value 2.009 and at a significance value of $0.000 < 0.025$. This means that inflation has a significant effect on the provincial minimum wage in West Sumatra.

The results of this research indicate that higher inflation will increase the provincial minimum wage. This shows that inflation arises due to an increase in public demand and pressure to increase production costs which causes economic liquidity which is characterized by an increase in the amount of money in circulation, increased productivity, and increased seasonal demand such as holidays and New Years, as well as an increase in other necessities of life. . Therefore, the provincial minimum wage must adjust to inflation so that workers can still buy the same goods and services as before, and to offset the pressure of higher living costs, the provincial minimum wage must also be increased.

This research fits with the theory put forward by Soraya on the type of cost push inflation that causes a decline in the rupiah, famine, and has an impact on the government so that it increases the provincial minimum wage. Then this research also fits with the theory put forward by Huda that inflation is the cause of reduced purchasing power of the people, especially for people who have minimal income, wage increases are not as fast as price increases because they are determined once a year, which in turn causes inflation to decline real wages for each worker with a consistent income, hence the need for the provincial minimum wage to be increased in order to balance rapidly increasing prices.

This research is in accordance with previous research by Dahlia Tsalsalaila who concluded that inflation has a significant effect on the provincial minimum wage as evidenced by a significance value of $0.000 < 0.05$. And then contrary to previous research by M. Zahari MS concluded that inflation did not have a significant effect on the provincial minimum wage as evidenced by a significance value of $0.376 > 0.05$.

b. The Effect of Economic Growth on the Provincial Minimum Wage

The resulting coefficient value on the economic growth variable is 59888.021. This means that for example 1% of economic growth has increased, then the Provincial Minimum Wage tends to increase by Rp. 59888,021. The variable results explained that economic growth had a significant effect because the tcount was $2.724 > t_{table}$ value 2.009 and the significance value was $0.009 < 0.025$. The results are obtained if economic growth significantly affects the provincial minimum wage in West Sumatra.

The research results stated that the more economic growth increases, the provincial minimum wage will increase. This is in line with the classical economic growth theory presented by Adam Smith which explains that economic growth causes enthusiasm to get maximum profit, as if profits increase, investment increases, savings increase, and production scale increases so that it can increase the demand for labor which makes wage rates also increased.

This research is also in line with the theory presented by Karim which explains that economic growth is very important because economic growth is per capita output which shows real wage growth and rising living standards, if there is an increase in labor productivity as measured by economic growth, wages increase

This research is in line with previous research by M. Zahari MS which concluded that economic growth significantly influences the provincial minimum wage as evidenced by a significance value of $0.011 < 0.05$. And then it is not in line with the research made by Luh Kertiasih which explains that economic growth does not significantly affect the provincial minimum wage as evidenced by a significance value of $0.0881 > 0.05$.

c. The Effect of Inflation on and Economic Growth on the Provincial Minimum Wage

The resulting constant value for the inflation and economic growth variables is 945347.145. This means that if inflation and economic growth are equal to zero, then the assumed value for the provincial minimum wage will increase by RP. 945347,145. The variable results explained that inflation and economic growth had a significant effect because F_{count} was $8.129 > F_{table}$ value 3.187 and at a significance value of $0.001 < 0.05$. The result is that inflation and economic growth significantly affect the provincial minimum wage in West Sumatra.

The research results state that there is an effect of inflation and economic growth on the increase in the provincial minimum wage. This is in line with wage formula No. 78 of 2015 which sets a minimum wage based on inflation and economic growth. Article 43 paragraph (3) explains that the basis for determining the minimum wage method is the current minimum wage plus the multiplication of the inflation rate and economic growth.

This research is also in line with the theory presented by Nadhiroh which explains that the wage calculation formula mentioned in Article 43 paragraph (3) can provide certainty for an increase in the minimum wage each year for workers. The certainty of this increase can be used as a reference for entrepreneurs and companies in weighing and calculating the amount of production costs incurred and determining the basic price that is marketed.

This research is in line with previous research by M. Zahari MS which concluded that inflation and economic growth significantly affect the provincial minimum wage as evidenced by a significance value of $0.017 < 0.05$. And then it is not in line with the research made by Luh Kertiasih which explains that inflation and economic growth do not significantly affect the provincial minimum wage as evidenced by a significance value of $0.0985 > 0.05$.

CONCLUSIONS AND RECOMMENDATIONS

1. Conclusion

- a. Inflation has a significant effect on the provincial minimum wage, because t_{count} 4.031 $>$ t_{table} 2.009 and sig. 0.000 $<$ 0.05. This means that the inflation variable partially has a significant effect on the provincial minimum wage variable, so the hypothesis put forward by H_0 is rejected and H_a is accepted.
- b. Economic growth significantly affects the provincial minimum wage, because t_{count} 2.724 $>$ t_{table} 2.009 and sig. 0.009 $<$ 0.05. This means that economic growth partially

affects the provincial minimum wage, so the hypothesis put forward by H_0 is rejected and H_a is accepted.

- c. Inflation and economic growth affect the provincial minimum wage, because $F_{count} 8.129 > F_{table} 3.187$ and $sig. 0.001 < 0.05$. This means that inflation and economic growth simultaneously affect the provincial minimum wage, so the hypothesis put forward by H_0 is rejected and H_a is accepted.

2. Suggestion

- a. It is advisable to determine the provincial minimum wage to always pay attention to the inflation rate, because the inflation rate is not proportional to the increase in nominal wages.
- b. The increase in the provincial minimum wage is suggested by adjusting the price requirements for goods and services so that they can balance people's incomes.
- c. Determination of the provincial minimum wage is recommended to monitor economic growth with appropriate and accurate surveys to avoid inequality in income distribution.

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