



Analysis Of Factors Affecting Labour Absorption In South Sumatra Province 2008-2022

Lisa Hermawati ¹⁾ Andri Irawan ²⁾

^{1,2)} Faculty Of Economics and Business, Baturaja University, Indonesia

Email: ¹⁾ lisahermawati.iesp@gmail.com , ²⁾ andriirawan896@gmail.com

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ABSTRACT

The research aimed to determine the Analysis of Factors Affecting Labour Absorption in South Sumatra Province 2008-2022 partially and simultaneously. This research was quantitative in nature with secondary data obtained from BPS South Sumatra Province with total time series data for 15 years 2008-2022. The method used was multiple linear regression. The data processing process was carried out with the help of a computer application, namely the SPSS program. The independent variables in this research were Minimum Wage (X1) and Education Level (X2) then the dependent variable was Labor Absorption (Y). The research results showed that simultaneously the Minimum Wage (X1) and Education Level (X2) variables influenced the Labor Absorption (Y) of South Sumatra Province in 2008-2022. Meanwhile, partially the Minimum Wage variable (X1) had a positive and significant influence on the Labor Absorption (Y) of South Sumatra Province in 2008-2022, and the Minimum Wage variable (X2) had a positive and significant influence on the Labor Absorption (Y) of South Sumatra Province 2008-2022. The coefficient of determination showed that the contribution of the Minimum Wage (X1) and Education Level (X2) in South Sumatra Province was 98.2%, while the remaining 1.8% was caused by other factors not examined in this research model

INTRODUCTION

Indonesia is one of the developing countries with the largest population in the world, which poses significant challenges regarding labor. Labor issues are critical for any nation as they are closely linked to unemployment, which in turn reduces productivity and community income, leading to poverty and other social problems (Sillahali, 2013). A country's ability to produce goods and services improves due to factors such as increasing production capabilities in both quantity and quality, the growth of capital goods through minimum wage adjustments, and advancements in technology (Sukirno, 2017). Economic growth is further driven by population growth, work experience, and improved education, enhancing workforce skills. Labor absorption

refers to the number of workers employed within a business unit or sector. An excessively large population relative to available job opportunities results in unemployment among those of working age, as the number of job seekers exceeds available positions (Mankiw, 2013). Increases in wages above the market equilibrium level cause an increase in the labor supply and a decrease in labor demand, leading to an excess of labor and higher unemployment rates (Mankiw, 2013). Insufficient wages not only affect workers' livelihoods but also their purchasing power, which in turn affects industries catering to consumer goods for the working class (Chaudhry and Rosyidil, 2012). Education plays a crucial role in national development as it enhances the quality of human resources, representing a significant investment in a nation's future (Mulyadi, 2017). In economic development within developing countries, rising unemployment presents a more complex and serious issue than income distribution disparities favoring the lowest income earners. Recent decades have shown that economic growth in these countries has not kept pace with population growth in creating sufficient employment opportunities, exacerbating the unemployment problem year by year (Sukirno, 2013). For instance, in South Sumatra Province, data on minimum wages, educational levels, and employment trends from 2007 to 2021 highlight the prevailing conditions and challenges faced by the workforce (see table below). This revision aims to clarify and streamline the original text while ensuring accuracy and coherence in presenting the issues related to labor, wages, and economic development in Indonesia.

Table 1 Minimum Wage, Education Level And Number Of The Working Population In South Sumatra Province In 2018-2021

No	Year	Minimum Wage (X1)	Education Level (X2)	Population Employed (Y)
1	2018	2 595 995	8,48	3 963 870
2	2019	2 804 453	8,60	3 968 499
3	2020	3 043 111	8,68	4 091 383
4	2021	3 144 446	8,78	4 179 708
5	2022	3 144 446	8,82	4 289 704

Source: BPS South Sumatra 2023

The table above indicates a growing trend in the number of people employed in South Sumatra Province from 2018 to 2022. The increasing TPAK figure reflects a rising economically active population engaging in work and economic activities. Education levels in South Sumatra Province vary annually, impacting labor absorption. There is a positive correlation between education level and labor absorption, suggesting that higher education levels lead to increased absorbed labor (Silhombing, 2019). During the period from 2018 to 2022, the minimum wage in South Sumatra Province showed an upward trend. Starting at 2,595,995 rupiah in 2018, it steadily increased to 3,144,446 rupiah by 2022. Based on the explanation and phenomena observed, further research is needed to explore in depth the influence of minimum wage and education level on labor absorption in South Sumatra Province from 2008 to 2022.

LITERATURE REVIEW

Minimum Wage

Wages are defined as compensation for both physical and mental services provided by labor to employers (Sukirno, 2013). They represent fair and reasonable payment given to workers for their services in achieving organizational goals. Unlike salaries, which are relatively fixed, wages are typically associated with payment for casual labor processes (Rival, 2013). The National Wage Research Council defines wages as compensation accepted by employers for work or services rendered, ensuring continuity of livelihood and production worthy of humanity

(Yusuf, 2017). For companies, wages constitute a significant portion of production costs, and variations in wage levels can impact labor absorption. An increase in the wage rate raises production costs, subsequently increasing the price per unit of goods produced. Higher prices can reduce demand for goods and services, leading companies to reduce labor utilization in production processes. Thus, the relationship between wages and labor absorption tends to be negative (Sukirno, 2013). When the government-set minimum wage exceeds the market equilibrium wage, it reduces labor demand and consequently limits employment opportunities. Conversely, if the minimum wage is set below the equilibrium wage, labor demand increases, leading to more job opportunities (Mankiw, 2013).

Education

Education level represents a long-term process employing systematic and organized procedures through which managerial manpower acquires conceptual and theoretical knowledge for general purposes (Muda, 2019). Education serves as an investment in human resources, directly contributing to national income growth by enhancing skills and labor productivity. Additionally, education is expected to mitigate economic backwardness by improving human capabilities and motivation to excel (Mulyadi, 2017). As a productive investment, education is crucial for improving the quality of human resources, thereby supporting increased national productivity across various fields and development sectors (Pratiwi, 2018). Workers with college-level education in a company have the capability to enhance output through knowledge utilization, leading to increased productivity. Consequently, educated workers tend to earn higher wages compared to those with lower educational attainment (Sukirno, 2013). According to Purnamil (2015), the increasing number of higher education graduates can have positive or negative effects. It is positive if the rise in graduates matches job opportunities available to them; otherwise, it may lead to unemployment or underemployment.

Labor Absorption

Labor absorption refers to the ability of a job field to employ workers who meet the criteria for that job. The extent of labor absorption may match or be smaller than the number of available employment opportunities. When the number of employment opportunities equals labor absorption, there is no unemployment. However, if labor absorption falls short of available opportunities, unemployment occurs (Sari, 2017). Labor absorption is the number of people accommodated to work in an employment business unit, associated with business activity or agency where a person works or has worked (Widdyantoro, 2013).

Labor

Labor constitutes the population of working age (aged 15-64 years) or the total population in a country capable of producing goods and services, including production, distribution, and investment (Mulyadi, 2017). Employment is derived from the word 'to employ,' involving the provision of work or a source of livelihood (Taufik, 2014). Labor is a critical factor in the production process, and expanding employment opportunities is a key objective of economic development. Industrial development, particularly labor-intensive industries, is a primary way to expand employment opportunities. Through investment, economic actors can create opportunities to expand employment (Adill, 2017). Factors affecting labor absorption are related to labor demand, influenced by wage rates, income, and investment (Shafira, 2020).

METHODS

In this research, quantitative methods are employed, which involve data in numerical form (Sunyoto, 2012). The scope of this research focuses on analyzing the minimum wage (X1) and education level (X2) on employment (Y) in South Sumatra Province from 2008 to 2022. The data

utilized in this study are secondary data sourced from the Central Statistics Agency (BPS). Secondary data refers to information that has been collected by others and has undergone statistical processes (Duli, 2020). To determine the magnitude of the influence of the independent variables on the dependent variable, multiple linear regression analysis is used. This statistical method allows researchers to assess the relationship between multiple independent variables (in this case, minimum wage and education level) and a dependent variable (employment). The general form of the multiple linear regression model used in this context can be represented as follows (Sugiyono, 2017)

RESULTS

The classical assumption test encompasses several aspects, including assumptions related to normality, multicollinearity, heteroscedasticity, and autocorrelation (Sanusi, 2012).

Normality Test

Table 2 Presents The Results Of The Normality Test Using The One Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		15
Asymp. Sig. (2-tailed)		.988

Based on the results of the normality test using the One Sample Kolmogorov-Smirnov test in Table 1 above, the significance value (Asymp. Sig. 2-tailed) is 0.988. When compared to the significance level of 0.05 (α), the significance value of 0.988 is greater than 0.05. Therefore, it can be concluded that the residual data used in this study are normally distributed.

Multicollinearity Test

Table 3 Presents The Results Of The Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
	(Constant)		
1	Minimum Wage	.103	9.677
	Education Level	.103	9.677

Based on the analysis results in Table 2, the VIF (Variance Inflation Factor) coefficient values for each variable, namely Minimum Wage (X1) and Education Level (X2), are 9.677 and 0.103, respectively. Since the VIF value is less than 10 and the tolerance value is more than 0.10, it can be concluded that there is no multicollinearity present.

Heteroskedasticity Test

Table 4 Presents The Results Of The Heteroskedasticity Test Using The Glejser Test

Coefficients	
Model	Sig.
(Constant)	.796
Minimum Wage	.637
Education Level	.729

Based on the results of the analysis using the Glejser Test in Table 4, it is evident that the significance values are greater than the significance level (α) of 0.05 for both the Minimum Wage

variable (X1) at 0.637 and the Education Level variable (X2) at 0.729. Therefore, it can be concluded that there is no heteroskedasticity problem present.

Autocorrelation Test

Table 5 Presents The Results Of The Autocorrelation Test Using The Durbin-Watson (DW) Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.991 ^a	.982	.978	49556.69471	1.562

Based on the results from the SPSS output, it is observed that the Durbin-Watson (DW) statistic value is 1.562. Referring to the Durbin-Watson table for a significance level of 0.05 (5%) with the number of research samples (n) = 15 and the number of independent variables (k) = 2, we find $dL = 0.9455$ and $4 - dL = 3.0545$, and $DU = 1.5432$ and $4 - DU = 2.4568$. Given that the DW statistic (1.562) is greater than the lower limit (dU) and less than $4 - dU$ (2.4568), it is concluded that there are no symptoms or issues of autocorrelation.

F Test

Table 6 Presents The Results Of The Simultaneous Significance Test (F Test)

Model		F	Sig.
	Regression	318.893	.000 ^b
1	Residual		
	Total		

Based on the table above, the significance value (Sig) is 0.000, which is less than the significance level of 0.05. Therefore, it can be concluded that Minimum Wage and Education Level together have a significant effect on Labor Absorption.

T-Test

Table 7 Presents The Results Of The Partial Significance Test (T-Test)

Model		t	Sig.
	(Constant)	1.106	.290
1	Minimum Wage	5.657	.000
	Education Level	2.555	.025

Based on the output in the "Sig" column of the Coefficients table, the significance value is 0.000, which is less than 0.05. Therefore, it can be concluded that Minimum Wage has a significant effect on labor absorption. Additionally, the significance value of 0.025, which is also less than 0.05, indicates that the level of education has a significant effect on labor absorption.

Coefficient Of Determination (R-Squared)

Based on the SPSS output in Table 5, the coefficient of determination (R Square) of the regression model is 0.982. This implies that the combined influence of Minimum Wage and Education Level (X) on the variation in Labor Absorption (Y) is 98.2%. The remaining 1.8% of the variation is attributed to other factors not studied, such as investment, income, and others.

Interpretation of Regression Model

Table 8 Provides The Interpretation Of The Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	906127.004	1638529.843	
Minimum Wage	.266	.094	.672
Education Level	279257.028	218596.829	.304

$$Y = 906127.004 + 0.266 + 279257.028$$

Based on the equation provided, the interpretation is as follows:

1. The value of the constant coefficient (α) is positively 906,127.004, meaning that if both Minimum Wage (X1) and Education Level (X2) are zero, the estimated Labor Absorption (Y) would be 906,127 people.
2. The regression coefficient of Minimum Wage (X1) is 0.266. This positive coefficient indicates a direct relationship between Minimum Wage and Labor Absorption, suggesting that for every unit increase in Minimum Wage (X1), on average, Labor Absorption (Y) increases by 266 people, assuming Education Level (X2) remains constant.
3. The regression coefficient of Education Level (X2) is 279,257.028. Similarly, this positive coefficient signifies a direct relationship between Education Level and Labor Absorption. Specifically, a 1% increase in Education Level (X2) is associated with an average increase of 279,257.028 people in Labor Absorption (Y), assuming Minimum Wage (X1) remains unchanged.

DISCUSSION

Effect Of Minimum Wage On Labor Absorption

Based on the analysis, it is evident that the minimum wage has a positive and significant influence on employment. According to the t-test, the variable for minimum wage shows a t-value of 5.657, which exceeds the critical t-value of 2.17881, and obtains a significance value smaller than 0.05. This finding is consistent with research (Arifin, 2013), which suggests that a 1% increase in the district/city minimum wage leads to a 0.37% increase in employment. Similarly, (Purnami, 2015) posits that changes in wage levels influence labor demand, with higher minimum wages stimulating increased labor absorption. This situation indicates that raising the minimum wage in South Sumatra Province motivates workers to be more productive in producing output. With higher income, community purchasing power increases, driving up demand for goods and services. This heightened purchasing power attracts investment, resulting in companies or industries needing more labor to produce goods and services, thereby increasing employment in South Sumatra. Jones (1997) found that a 1% increase in the minimum wage in Ghana increases the number of informal sector workers by approximately 14%. Research (Saputri, 2011) titled "Analysis of Labor Absorption in Salatiga City" concluded that wage and labor productivity variables jointly have a positive and significant influence. Additionally, research (Rosalina, 2013) titled "Factors Affecting Labor Absorption in Indonesia" concluded that Gross Regional Domestic Income (GRDP), Real Wages, and Investment significantly contribute to labor absorption.

Effect Of Education Level On Labor Absorption

Based on the analysis of education level, it is apparent that it has a positive and significant influence on labor absorption. According to the t-test, the education level variable shows a t-value of 2.555, which exceeds the critical t-value of 2.17881 and obtains a significance value less

than 0.05. This indicates that the relationship between education level and labor absorption is positive, suggesting that higher levels of completed education correlate with higher employment levels among the workforce. Furthermore, the relationship between education level and labor absorption is positive, consistent with research (Silombing, 2019), which states that education level can increase labor absorption and individuals with lower education levels find it difficult to be accepted in the job market. It can be concluded that the level of education has a positive relationship with labor absorption. This means that if the level of education increases, the absorbed labor will also increase. The table above also shows that the average length of schooling shows an increase in each year. This is supported by research (Purnami, 2015) entitled "The Effect of Education Level and Regional/City Minimum Wage on Labor Absorption in West Java Province in 2010-2013", which concluded that education level and district/city minimum wage have a significant influence on labor absorption in West Java Province. Similar to the results of the author's research, education affects labor absorption, where elementary and junior high school education plays a larger role in labor absorption in the economic sector compared to workers with high school and university education. This is also supported by research (Febrianti, 2012) entitled "Linkage of Education Level as a Form of Human Resources Investment with Labor Absorption in Indonesia", which concluded that the majority of Indonesia's population only received the highest education at the elementary level. This correlates with the country's employment conditions, which are dominated by the agricultural sector and labor professions. The higher a person's level of education, the higher the level of productivity or performance of the workforce, in accordance with the theory of human capital that a person can increase his income through increased education (Silmanjuntak, 2001).

CONCLUSION

Based on the results of the data analysis conducted, it can be concluded that both the Minimum Wage and Education Level variables significantly affect Labor Absorption in South Sumatra Province from 2008 to 2022. The Minimum Wage variable had a partially significant and positive effect on labor absorption in South Sumatra Province from 2008 to 2022. This implies that an increase in the Minimum Wage leads to an increase in Labor Absorption. Similarly, the Education Level variable partially influences and significantly affects Labor Absorption in South Sumatra province from 2008 to 2022.

SUGGESTION

The government is expected to prioritize education and overhaul the entire education system to better align with current employment needs. Local governments should also tackle wage issues and actively promote increased employment in South Sumatra Province. This could involve offering incentives or bonuses to workers, thereby enhancing worker welfare without compromising employer interests.

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