

Research article

Does Economic Growth, Wage Rate, and Industrial Development Matter for Labor Absorption?

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Abstract: The dimensions of employment problems are not just limited field or job opportunities and low productivity but are much more serious with different causes. This study aims to determine the effect of the rate of economic growth, economic growth, minimum wages, and the number of industrial units on employment in South Sumatra Province. The data analysis method used in this study is a quantitative analysis method using panel data regression and usage. This research covers a broad scope, namely as many as 17 districts/cities in South Sumatra for 6 years (2014-2019). Based on the results of the analysis and discussion that has been carried out, it can be concluded that the districts/cities in South Sumatra Province in 2016-2019 had the highest employment by looking at the Random Effect Model (REM) labor estimation coefficient which shows that the highest employment is in Palembang City at 75,452,015. Meanwhile, the lowest value is in the Ogan Ilir district at 68,194,663.

Keywords: Labor Absorption, Economic Growth, Minimum Wage, Number of Industries

JEL Classification: H41, H54, O4

Abstrak: Dimensi masalah ketenagakerjaan bukan hanya terbatasnya lapangan atau kesempatan kerja dan rendahnya produktivitas tetapi jauh lebih serius dengan penyebab yang berbeda. Penelitian ini bertujuan untuk mengetahui pengaruh laju pertumbuhan ekonomi, pertumbuhan ekonomi, upah minimum, dan jumlah unit industri terhadap penyerapan tenaga kerja di Provinsi Sumatera Selatan. Metode analisis data yang digunakan dalam penelitian ini adalah metode analisis kuantitatif dengan menggunakan regresi dan penggunaan data panel. Penelitian ini mencakup ruang lingkup yang luas yaitu sebanyak 17 kabupaten/kota di Sumatera Selatan selama 6 tahun (2014-2019). Berdasarkan hasil analisis dan pembahasan yang telah dilakukan, maka dapat disimpulkan bahwa kabupaten/kota di Provinsi Sumatera Selatan pada tahun 2016-2019 memiliki penyerapan tenaga kerja tertinggi dengan melihat koefisien estimasi tenaga kerja Random Effect Model (REM) yang menunjukkan bahwa penyerapan tenaga kerja tertinggi berada di Kota Palembang sebesar 75.452.015. Sedangkan nilai terendah berada di Kabupaten Ogan Ilir sebesar 68.194.663.

Kata Kunci: Penyerapan Tenaga Kerja, Pertumbuhan Ekonomi, Upah Minimum, Jumlah Industri

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1. INTRODUCTION

Economic development and development in other fields always involve human resources as one of the actors of development. Therefore, the population of a country is the main element in development (Surya et al., 2021). A large population does not always guarantee the success of development and can even become a burden for the sustainability of the development. A population that is too large and not proportional to the availability of employment will cause some of the population who are of working age to not get a job (Orhan et al., 2019).

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The dimensions of employment problems are not just limited field or job opportunities and low productivity but are much more serious with different causes. In the past decade, the main problem has been the failure to create new jobs at a rate commensurate with the growth rate of industrial output. Along with changes in the macroeconomic environment of most developing countries, the rapidly increasing unemployment rate is mainly due to "limited demand" for labor (Li et al., 2019). The labor force participation rate illustrates how much involvement the population is in economic activities. and industry. The labor force participation rate is people of working age who enter the labor market, who are working, or who are trying to find work. The higher the labor force participation rate, the higher the labor force in the production process of goods and services in an economy (Pahl & Timmer, 2020).

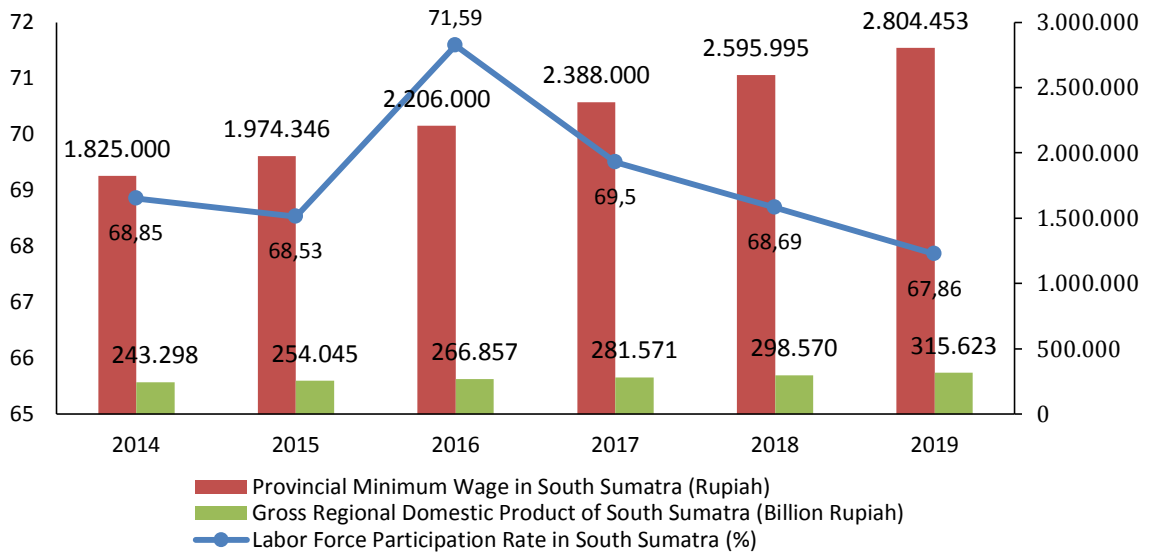


Figure 1. Labor Force, Minimum Wage, and GRDP in South Sumatra Province, 2014-2019

Source: Statistics of South Sumatra Province (2020)

The labor force participation rate in South Sumatra increased only in 2016 which increased by 4.46 percent while in other years, namely from 2015, 2017 to 2019 it always decreased. The highest decline occurred in 2017 which decreased by 2.91 percent. The decline in this period occurred due to an increase in the number of working age which was greater than the increase in the number of the workforce.

The minimum wage is not in line with the trend of very volatile labor force participation rates, the minimum wage in South Sumatra always increases every year. Every year, this increase is carried out by the government to improve the quality of life of the workers and also to increase the participation of the workforce. The highest increase occurred in 2016 which increased by 11.73 percent while the lowest increase occurred in 2019 which was 8.02 percent. The average increase is 8.58 percent. It can be said that the increase in the minimum wage by the government has not been able to increase the labor force participation rate in South Sumatra. Another economic factor apart from wages that also affect employment is economic growth. Good economic growth in a country can encourage producers to increase their production capacity by conducting factory expansion, factory expansion will be able to encourage greater employment (Gherghina et al., 2020). Economic growth is an indicator of the development of a region. To find out the economic growth of a region, it is necessary to compare the real income of the region from year to year, the indicator used is the Gross Regional Domestic Product (Campante & Yanagizawa-Drott, 2018).

The gross regional domestic product of South Sumatra Province experienced the highest increase in 2018 which increased by 6.03 percent. This increase occurred because, in 2018, the Province of South Sumatra was appointed to host a sporting event, namely the Asian Games which provided a multiplier effect on other business sectors, one of which was the construction and acceleration of supporting infrastructure as well as the increasing construction of buildings, public

facilities, and infrastructure such as hotels, shopping centers, sports facilities and so on related to the event. while the lowest increase occurred in 2015 which only increased by 4.41 percent. This is because the economy of South Sumatra in 2015 was still in a depressed state of the global economy, the factors that accelerated growth did not work.

Industry in South Sumatra Province is still divided into 5 Clusters, namely food, clothing, and leather from rubber, chemicals and building materials, metals and services, and general crafts. The food industry is still the industry that has the highest number of units where in 2017 there were 4,760 units to 5,338 units in 2018 this happened due to several factors, namely the number of production factors available in the market was high and the market share was still low. area in South Sumatra Province. In contrast to the handicraft and general industry which has the lowest proportion of the number of units in South Sumatra Province, namely 480 units in 2017 to 538 units in 2018, this happens because in South Sumatra alternative raw material sources are still relatively difficult to find and develop and demand for goods produced is still low (Industrial Department of South Sumatra Province, 2020).

Labor absorption can be related to the balance of interaction between labor demand and labor supply, in which the market labor demand and market labor supply together determine an equilibrium wage level and a balance of labor use (Vermeulen et al., 2018). In the world of work or terms of employment, each sector is different in the absorption of its workforce, for example, workers in the formal sector. The selection of its workforce requires special skills, education, expertise, and experience to be able to work in the formal sector (Vermeulen et al., 2018). This view emphasizes the role of the minimum wage as a market regulation policy, this policy is the same as antitrust policy but is a bitter pill for workers with low wages. The minimum wage cannot affect the number of workers. If managers could increase wages, the wage increase is carried out in the form of increasing product prices. Because demand is highly inelastic (in a monopsony market), consumers continue to buy products at high prices. As a result, managers do not have the power to lay off workers (Soylu et al., 2018).

2. RESEARCH METHODS

This study aims to determine the effect of the rate of economic growth, economic growth, minimum wages, and the number of industrial units on employment in South Sumatra Province. This research covers a broad scope, namely as many as 17 districts/cities in South Sumatra for 6 years. The data analysis method used in this research is a quantitative analysis method using panel data regression and usage. The time series data in this study spans five years, from 2014-2019.

Table 1. Variable Measurement

Variables	Measurement	Unit	Study Period	Data Sources
Labor	Number of workers district /city of South Sumatra Province	People	2014-2019	Indonesian Statistics for South Sumatra
Growth	Economic growth districts/cities of South Sumatra Province	Percent	2014-2019	Indonesian Statistics for South Sumatra
Wage	Minimum wage district /city of South Sumatra Province	IDR	2014-2019	Indonesian Statistics for South Sumatra
SMEs	Number of units in industrial district /city of South Sumatra Province	Unit	2014-2019	Industrial Department of South Sumatra

The analytical technique used is expected to be able to find out how much impact the independent variable has on the dependent variable. The econometric model used in this study can determine the reciprocal relationship between theory formulation, testing, and empirical estimation. In econometric theory, panel data is data that is combined between cross-section data and time series data. Therefore, the number of observation data in panel data is the result of the multiplication of time series data and cross-section data. The basic model that will be used in this research is as follows.

$$Labor_{it} = \beta_0 + \beta_1 Growth_{it} + \beta_2 Wage_{it} + \beta_3 SMEs_{it} + \epsilon_{it} \tag{1}$$

where labor is the number of workers in the district/city of South Sumatra Province. Growth is economic growth in districts/cities of South Sumatra Province. Wage is the minimum wage district/city of South Sumatra Province. SMEs are industrial districts/cities of South Sumatra Province. β_0 is constants, $\beta_1, \beta_2, \beta_3, \beta_4$ is the regression coefficient, i is district/city, t is the year, and ϵ is the error term.

3. RESULTS AND DISCUSSION

The regression results show that the variable economic growth rate and the number of industrial units have a positive effect on employment, while the minimum wage has a negative effect on employment. The rate of economic growth has a positive and significant impact on the absorption of micro and small industry labor in the districts/cities of South Sumatra Province. In line with this theory, the opinion of Robert Sollow and Trevor Swan regarding the relationship between economic growth and employment opportunities. Swan believes that economic growth depends on improving the quality and quantity of production factors. This theory supports the opinion of neoclassical theory, namely that the economy is in full employment if the factors of production always develop in harmony (Kahn, 2022). Based on the best estimation results, the random effect model using multiple regression can be simplified as follows:

Table 2. The Estimation Results of the Random Effect Model

Dependent variable = labor				
Variables	Coefficient	Std. Error	t-Statistic	Prob.
Constant	71711.50	23785.71	3.0148	0.0037
Growth	500.6416	152.3317	3.2865	0.0016
Wage	-4972.557	1590.470	-3.1264	0.0027
SMEs	1.980214	0.356561	5.5536	0.0000
R-squared	0.84166			
AdjR-squared	0.83423			
F-statistic	113.3976			
Prob (F-statistic)	0.0000			

Source: Processed Data, 2021

Economic growth increases, and firms tend to experience increased business activity and expansion. This creates greater demand for labor to meet increased production and service needs (McMillan & Zeufack, 2022). In this case, firms will recruit more employees, thus opening up employment opportunities for individuals seeking work. Strong economic growth and an increasing number of industrial units are often accompanied by an increase in business investment (Sen, 2019). Growing companies will expand their operations, build new factories, or open new branches. This creates new jobs and increases employment opportunities for the local community. High economic growth and industrial expansion can trigger a multiplier effect in the economy. When a sector of the economy expands, it can encourage the growth of related sectors, such as support services, logistics, and other service sectors. The increase in activity in these sectors also entails an increase in labor, thereby increasing overall employment.

The minimum wage has a negative and significant effect on the absorption of micro and small industry labor in the districts/cities of South Sumatra Province. This research is in line with Pratama et al. (2020) in the short term, the provincial minimum wage has a negative effect while in the long term, the provincial minimum wage has a positive and significant effect on employment in the Sumatra region. This result is also in line with Habanabakize et al. (2019) that real wages have a negative impact on the long-term employment rate. The research conducted by (Jaya & Kholilah, 2020) which examines minimum wages and employment, the results show that UMP has a negative effect on UMP, and a significant negative effect on employment, while economic growth has a significant positive effect on employment. The reason is that UMP remains

an obstacle to the creation of justice in the labor market because it creates price rigidity. This is supported by labor theory which states that the amount of labor demanded is inversely proportional to the wage, while a firm that wants maximum profit can choose the amount of labor that makes the marginal value added of labor multiplied by the selling price of the goods produced per unit equal to the wage. Furthermore, the firm will adjust the amount of labor used with changes in labor costs (Kahn, 2022). The labor demand curve in the short term has a negative slope, so the labor elasticity is negative.

The minimum wage is set at a high level, it increases the direct costs that firms have to pay to workers. Firms may feel burdened by increased labor costs, especially if they operate with thin profit margins (Arrowsmith & Parker, 2023). As a result, they may reduce the amount of labor recruited or reduce employees' working hours to save costs. To avoid higher labor costs, companies may choose to replace human workers with technology or automation. This may reduce the need for human labor and result in a decrease in employment (Purmini & Rambe, 2021).

The number of business units has a positive and significant effect on the absorption of micro and small industry labor in the districts/cities of South Sumatra Province. Theoretically, an increase in the number of business units will expand employment opportunities, this is because the company will need additional labor as a production factor. As a result, the demand for labor increases. In line with (Rizqi et al., 2022), the number of business units proved to have a significant positive effect on labor absorption. This means that the more the number of business units used by the company, the greater the absorption of labor for the company. In general, the growth of a sector business unit, in this case, a small industry in an area, will increase the number of jobs.

The districts/cities of South Sumatra Province have a significant reliance on the micro and small industry sectors as one of the key economic sectors. Within this sector, relatively small and localized businesses play an important role in creating employment. A larger number of business units will directly create more employment opportunities for the local community (Atiyatna et al., 2021). An increase in the number of business units in the micro and small industry sectors can create a positive multiplier effect on employment. As these businesses expand, they will increase the demand for various goods and services, such as raw materials, logistics, local suppliers, and other related service sectors. In this case, new jobs will also be created in these supporting sectors, which will provide additional benefits to overall employment (Riley & Bondibene, 2017).

Gross domestic product (GDP) and provincial minimum wage can directly mediate the unemployment rate. Investment cannot directly explain changes in the unemployment rate without the mediation of economic growth and provincial minimum wages in the Indonesian labor market (Tegep et al., 2019). Most of the number of micro and small industry workers in South Sumatra Province for the 2016-2019 period was dominated in the Palembang City area with 129,286 people. Meanwhile, the lowest number of workers in South Sumatra Province was in the North Musi Rawas district with 2,342 people in 2019. The highest average economic growth in South Sumatra Province in 2016-2019 was in Muara Enim district at 7.02 percent in 2019.

The minimum wage in the districts/cities of South Sumatra Province varies in each region depending on the ability of the region to determine its wage level. In South Sumatra Province, not all districts/cities have or set a minimum wage so the district/city follows the minimum wage set by South Sumatra Province every year. In 2019 South Sumatra Province set a minimum wage of IDR 2,804,453. In total, the micro and small industrial units of districts/cities in Sumatra Province during the period 2016 - 2019 fluctuated whereas in 2019 there were 80,307 units. Most of the micro and small industries in South Sumatra Province for the 2016-2019 period were dominated in the Ogan Ilir district area with a total of 20,421 units in 2019. The least number of micro and small industries in South Sumatra Province is in the North Musi Rawas district with 1,186 units in 2019.

4. CONCLUSIONS

Based on the results of the analysis and discussion that has been carried out, it can be concluded that the districts/cities in South Sumatra Province in 2016-2019 have the highest

employment by looking at the random effect model for labor estimation coefficient which shows that the highest employment is in Palembang City at 75,452,015. Meanwhile, the lowest value is in the Ogan Ilir district at 68,194,663. When viewed from the magnitude of the influence of the independent variable on the dependent, it can be seen from the variation of data assessed from the coefficient of determination which shows a value of 84.2 percent of the variable economic growth rate, minimum wage, and number of industrial units can explain variations in labor absorption. The rest (15.8%) is explained by other variables not included in the regression model.

To labor issues, the government and other stakeholders need to take strategic steps. Some steps that can be taken include creating new jobs through the development of potential economic sectors, improving the qualifications and skills of the workforce through education and training, and encouraging private sector investment and growth. In addition, economic policies that support inclusive growth and poverty alleviation are needed, as well as expanding access to basic social services such as education, health, and social protection. In essence, a large population can be an asset for development if managed well through inclusive and sustainable employment development. However, if not properly addressed, labor issues can become a serious obstacle to achieving sustainable and inclusive development.

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